

CHECKPOINT CARIBBEAN LTD.

June 7, 2019

VIA EMAIL: [leshak.andrea@epa.gov](mailto:leshak.andrea@epa.gov)  
AND FEDERAL EXPRESS

Andrea Leshak, Esq.  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 2  
290 Broadway, 17<sup>th</sup> Floor  
New York, NY 10007-1866

Re: Notice of Potential Liability and Request for Information Pursuant to Sections 107(a) and 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675, relating to the PROTECO Site in Peñuelas, Puerto Rico

Dear Ms. Leshak:

This letter is in response to EPA's Notice of Potential Liability and Request for Information issued to Checkpoint Caribbean Ltd., c/o Checkpoint Systems, Inc., dated March 28, 2019, and signed by Eric J. Wilson in the above referenced matter (the "Request for Information"). Checkpoint Caribbean Ltd., ("Checkpoint Caribbean") requested from EPA extensions of time to respond to the Request for Information. EPA granted the extensions to respond until June 7, 2019. Therefore, this response is submitted within the term provided.

Checkpoint Caribbean would like to clarify from the outset certain points. First, CCL Industries ("CCL") acquired the shares of Checkpoint Systems, Inc. ("Checkpoint Systems") on or about May 16, 2016, thus, Checkpoint Systems became a wholly-owned subsidiary of CCL.

Second, Checkpoint Caribbean is a wholly-owned subsidiary of Checkpoint Systems that closed operations in Puerto Rico on or about the first quarter of year 2012, and no longer has facilities or offices in Puerto Rico. Therefore, the availability of pertinent information and documents to respond to this Request for Information has been limited.

Although Checkpoint Caribbean operated as a separate and different entity from Checkpoint Systems, it has conducted a thorough and diligent search of documents at Checkpoint Systems headquarters in Thorofare, New Jersey in connection with Checkpoint Caribbean's former operations in Puerto Rico in order to adequately respond to the Request for Information. Also, Checkpoint Caribbean has diligently searched for files at the Puerto Rico Industrial Development Company ("PRIDCO"), from whom Checkpoint Caribbean leased certain properties from 1979 to approximately 2001.

As indicated below, most of the information requested in the Request for Information is not currently available to Checkpoint Caribbean due to the time that has passed from the period of time when PROTECO received hazardous substances from 1975 to 1999 (at least 20 years ago), and since Checkpoint Caribbean ceased operations in Puerto Rico in 2012 (7 years ago).



Consequently, after a thorough search for Checkpoint Caribbean files at Checkpoint Systems, only a very limited amount of documents have been found containing information that assisted us in responding to the Request for Information.

The responses to the Request for Information related to Checkpoint Caribbean are based on limited documents obtained from: (i) the EPA, through Mr. David N. Cuevas-Miranda, Ph.D., RCRA Section, Regional POC, Coral Reef Affairs, US EPA-Region 2 Caribbean Environmental Protection Division; (ii) from PRIDCO files; and (iii) from very few files located at Checkpoint Systems offices. Therefore, the responses to the questions in the Request for Information have been drafted by extracting relevant information from the available documents without any of the persons who participated in the preparation of the responses having personal or substantive knowledge of the information contained in these documents, or in the answers provided.

Furthermore, based on the information in the documents obtained from EPA and PRIDCO, Checkpoint Caribbean's hazardous waste stream consisted of ferric chloride, aluminum chloride, hydrochloric acid, and water. These hazardous wastes are considered by EPA as corrosive D002 waste, and are not the contaminants that EPA has identified at the PROTECO site contaminating the groundwater, namely Mercury, Tetrachloroethylene (PCE), 1,1-Dichloroethylene (1,1-DCE), Trans-1,2-Dichloroethylene (Trans-1,2-DCE), 1,1,1-Trichloroethane (1,1,1-TCA), 1,1-Dichloroethane (1,1-DCA), and 1,2-Dichloroethane (1,2-DCA) (the "PROTECO Contaminants"). Therefore, Checkpoint Caribbean respectfully submits that it is not responsible, and should not have any liability for the presence of the PROTECO Contaminants in the groundwater at the PROTECO site, as these contaminants were not generated or were present in Checkpoint Caribbean's waste stream and were not transported, or arranged for disposal by Checkpoint Caribbean to the PROTECO site.

Notwithstanding the foregoing, and without assuming any facts, responsibility, or liability as alleged in the Request for Information, Checkpoint Caribbean is willing to cooperate in good faith with EPA in providing the answers to the Request for Information as fully and completely as practicable, based on the limited available information that it has obtained as of the date of this response. Therefore, Checkpoint Caribbean's responses to the questions of the Request for Information are based significantly on documents obtained or prepared by others, and it does not mean that Checkpoint Caribbean is admitting as a fact or validating the correctness, accuracy or exactness of any information or statement made by any person in any particular document, and is not waiving its right to amend, modify, or challenge the information contained in those documents if new or additional information or documents become available in the future.

Checkpoint Caribbean nonetheless respectfully sets forth the general objections stated in the APPENDIX A of this letter to preserve its rights. In this regard, Checkpoint Caribbean provides the following responses to the Request for Information based on its best knowledge and the very limited available information that it has obtained at the time of submitting this response. Furthermore, these responses should not be considered as an admission of facts, guilt, or liabilities by Checkpoint Caribbean, or as an assumption of liabilities or responsibility by Checkpoint Systems or CCL on behalf of Checkpoint Caribbean. Accordingly, Checkpoint Caribbean respectfully reserves the right to supplement, amend or correct any of the responses contained below, if new or additional information is found or obtained.



Subject to, and without waving such objections, reservations, and rights, Checkpoint Caribbean responds as stated below.

Please note that the Exhibits have been numerated according to the question number. Not all the responses to the questions include an exhibit. Therefore, the exhibits will not follow a consecutive numeric sequence.

**Question 1**

Answer the following questions regarding the Company:

- a. State the correct legal name and mailing address for the Company;
- b. State the name(s) and address(es) of the President, Chief Executive Officer, and the Chariman of the Board (or other presiding officer) or the Company;
- c. Identify the state/commonwealth and date of incorporation of the Company and the name of its agents for service of process in the state/commonwealth of incorporation in Puerto Rico, if different; and
- d. Identify any successor corporations, predecessor corporations, or other entities related to the Company. If the Company is or was a subsidiary of affiliate of another corporation or other entity, identify each of those other entities' Chief Executive Officers, Presidents, and Chairpersons of the Board. Identify the state/commonwealth of incorporation and agents for service of process in the state/commonwealth of incorporation and in Puerto Rico, if different, for each entity identified in your response to this question.

**Response to Question 1**

Checkpoint Caribbean currently does not have information to formulate a response to this question with regards to Checkpoint Caribbean, except for the answers below.

- a. Checkpoint Caribbean Ltd., - c/o Checkpoint Systems, Inc. 101 Wolf Drive, Thorofare, New Jersey 08086 USA
- b. Not available
- c. Place of Incorporation – Cayman Islands  
Date of Incorporation – September 20<sup>th</sup>, 2005  
Service of Process – Intertrust Corporate Services (Cayman) Limited  
190 Elgin Avenue  
George Town  
Grand Cayman KYI-9005  
Cayman Islands
- d. See Corporate Chart in Exhibit 2

See Exhibit 1

The response below relates to Checkpoint Systems.

- a. Checkpoint Systems, Inc., 101 Wolf Drive, Thorofare, New Jersey 08086 USA
- b. President – John Dargan, 101 Wolf Drive, Thorofare, New Jersey 08086 USA



Chairman – Geoffrey T. Martin, 161 Worcester Road, Suite 603, Framingham, Massachusetts 0170 USA

- c. State of Incorporation – Pennsylvania  
Date of Incorporation – July 17, 1969  
Agent of Service of Process – Corporation Service Company 2595 Interstate Drive, Suite 103, Harrisburg, PA 17110 USA
- d. Checkpoint Systems, Inc. is a subsidiary of CCL Industries Inc. The CEO of CCL Industries Inc. is Geoffrey T. Martin.  
Other entities related to Checkpoint Systems, Inc. can be found in the attached corporate structure chart.

See Exhibit 2.

### Question 2

State the corporate history of the Company, including all name changes and mergers. List all names under which the company has operated and has been incorporated. For each other name, provide the following information:

- a. Whether that other company or business continues to exist, indicating the date and means by which it ceased operations (e.g., dissolution, bankruptcy, sale) if it is no longer in business:
- b. Names, addresses and telephone numbers of all registered agents, officers, and operations management personnel: and
- c. Names, addresses, and telephone numbers of all subsidiaries, unincorporated divisions or operating units, affiliates, and parent corporations if any, of that other company.

### Response to Question 2

Checkpoint Caribbean currently does not have information to formulate a response to this question with regards to Checkpoint Caribbean. However, Checkpoint Caribbean has requested access to review the information in the Puerto Rico State Department files. Upon review of these files, Checkpoint Caribbean will supplement this response, as applicable. The response below relates to Checkpoint Systems.

Regarding Checkpoint Systems, there have been no name changes. As to mergers, they occurred in the following dates:

- May 13, 2016 – Checkpoint Systems and CCL Industries USA Corp. (merger set up by CCL Industries Inc. for the purpose of acquiring Checkpoint Systems)
- January 1, 2017– Checkpoint Systems and OATSystems, Inc. (a wholly owned subsidiary of Checkpoint Systems)

See Exhibit 2.



**Question 3**

Identify all changes in ownership relating to the Company from its date of incorporation to the present, including the date of any ownership change. If any owner was/is a corporation, identify if the corporation was a subsidiary or division of another corporation. In your identification of any corporation, it is requested that you provide the full corporate name, the state/commonwealth or incorporation, and all fictitious names used/held by that corporation.

**Response to Question 3**

Checkpoint Caribbean currently does not have information to formulate a response to this question with regards to Checkpoint Caribbean. See response above regarding the file review at the Puerto Rico State Department.

Checkpoint Systems was incorporated in 1969 as a wholly-owned subsidiary of Logistics Industries Corporation. In 1977, pursuant to the terms of a merger between Logistics Industries Corporation with and into Lydall, Inc., the common stock of Checkpoint Systems was distributed to the shareholders of Logistics. Checkpoint Systems was acquired by CCL Industries Inc. on May 13, 2016, by way of a reverse merger. CCL Industries Inc. is a publicly listed (Toronto Stock Exchange) Canada corporation.  
See Exhibit 2.

**Question 4**

For each owner that is a subsidiary of another corporation identified in your answer to Request #3, above, please provide a chart that details the corporate structure from that other company through all intermediary entities to the ultimate corporate parent. For purposes of this information request, the term "ultimate corporate parent" means the corporate entity that, while owning or controlling the majority of the shares of common stock in a subsidiary corporation, is not primarily owned/controlled by another corporation.

**Response to Question 4**

Checkpoint Caribbean has not identified information relating to Logistics Industries Corporation/Lydall, Inc. CCL Industries, Inc. is the ultimate parent of Checkpoint Systems, Inc. See Exhibit 4.

**Question 5**

Provide copies of the Company's authority to do business in Puerto Rico. Include all authorizations, withdrawals, suspensions, and reinstatements.

**Response to Question 5**

We are currently waiting authorization from the Puerto Rico State Department to review the file of Checkpoint Caribbean. This response will be supplemented accordingly after the review of said file.



**Question 6**

State the dates during which the Company owned, operated, or leased any portion of the Facility, and provide copies of all documents evidencing or relating to such ownership, operation, or lease, including but not limited to purchase and sale agreements, deeds, leases, etc.

**Response to Question 6**

According to the information obtained from PRIDCO, Checkpoint Caribbean leased the following properties from PRIDCO at the Sabanetas Industrial Park in Ponce (See Exhibits 6, 6-1, 6-2, and 6-3):

T-1216-0-78-03 - from February 21, 1979 to September 30, 1991

T-1266-0-79 Module 1 – from October 1981 to May 1984

T-1266-0-79 Module 4 – from February 21, 1979 to present (meaning November 1991)

T- 1216-0-79-00 – from November 28, 1980 to January 16, 1991

T- 1216-0-77-04 – from February 21, 1979 to unknown

T-1216-0-77-05 – from unknown to approximately 2001

Checkpoint Caribbean purchased from PRIDCO the following properties, which later sold after ceasing operations:

Lot 27 of Sabanetas Industrial Park – December 20, 1996

Lot 28 of Sabanetas Industrial Park – June 20, 1990

Lot 29 of Sabanetas Industrial Park – June 20, 1990

Lot 30 of Sabanetas Industrial Park – February 7, 2000

Except for the Exhibits listed above in the response to this question, Checkpoint Caribbean has not found any additional document evidencing the lease or ownership of these properties.

**Question 7**

Indicate whether the Company has ever operated at a location other than the Facility. If yes, provide the correct names and address of the Company's other facilities where the Company carried out its operations.

**Response to Question 7**

Checkpoint Caribbean currently does not have any documents or information to formulate a response to this question in connection to Checkpoint Caribbean.

**Question 8**

Describe in detail the nature of the business and the operations conducted at the Facility and at any locations identified in response to Request #7, above, during the period that the Company operated there. Provide a brief description of the Company's operations at each facility, including the following:

- a. The dates such operations commenced and concluded; and



- b. The types of work performed at each facility, including but not limited to the industrial, chemical, or institutional processes and treatments undertaken at each facility.

### **Response to Question 8**

According to the documents obtained, Checkpoint Caribbean manufactured electronic aluminum labels that were used on consumer products as theft prevention devices. The manufacturing process involved the etching of aluminum with ferric chloride and muriatic acid solutions. This process generated a corrosive wastewater stream which was recycled back to the etching process until totally spent. See Interim RCRA Facility Assessment Report, Checkpoint Systems of Puerto Rico, Inc., prepared for the U.S. Environmental Protection Agency, Region II, by A.T. Kearny, Inc., March 1989. Exhibit 8 Section 1.2.

- a. Checkpoint Caribbean started manufacturing activities at Lot 6 of the Sabanetas Industrial Park in Ponce during the summer of 1980, until 1990. Thereafter, it moved its manufacturing operations to Lot 28 of said industrial park. See Checkpoint Systems of PR, Inc., RCRA Facility Investigation Work Plan prepared for the U.S. Environmental Protection Agency Region 2 by Checkpoint Caribbean, Ltd., December 2007. Exhibit 8-A Section 3.1.1. We currently don't have information regarding when Checkpoint Caribbean concluded operations in Lot 28 of the industrial park. However, upon information and believe, Checkpoint Caribbean closed its operations on or about the first quarter of year 2012. See article by ELNUEVODIA.COM "Checkpoint Systems se va de Puerto Rico", published Friday, October 21, 2011. Exhibit 8-A-2
- b. According to the documents obtained, the manufacturing process consisted of etching a roll of aluminum paper with ferric chloride. Hydrochloric acid was added, and as the etching strength of the solution decreased, fresh ferric chloride solution was added to strengthen the original solution which is hindered by aluminum buildup. At certain aluminum concentrations, the reaction slowed to a point of being uneconomical, and new etching solution was added. After the etching process, the aluminum roll was heat sealed with a plastic paper to form a web, which was then cut, packaged and transported for sale. The raw materials used in the process were aluminum, paper, clorox, hydrochloric acid, ferric chloride, adhesive glue, and trichloroethene used in conjunction with the adhesive application. The generated wastewater of the process contained ferric chloride, aluminum chloride, and muriatic acid (hydrochloric acid and water). See Exhibit 8 Section 1.2.

### **Question 9**

Describe how the Company came to possess the hazardous substances that came to be located at the Site.

### **Response to Question 9**

Checkpoint Caribbean currently does not have documents or information to formulate a response to this question in connection to Checkpoint Caribbean.



**Question 10**

List all hazardous substances used, generated, treated, stored, disposed of, manufactured, recycled, recovered, treated, or otherwise processed during the Company's operations at the Facility.

**Response to Question 10**

According to the documents obtained, Checkpoint Caribbean's raw materials that may have been also hazardous substances were hydrochloric acid, ferric chloride, and trichloroethene, the latter used in conjunction with the adhesive application. The generated wastewater of the manufacturing process contained ferric chloride, aluminum chloride, and muriatic acid (hydrochloric acid and water). See Exhibit 8 Section 1.2. Other substances that may have been used at Checkpoint Caribbean, per available information are Phosphoric Acid 85%, Sodium Hydroxide 50%, muriatic acid, and Polymeric Isocyanata. See PRIDCO Memorandum of August 8, 1991 from Rafael Gutiérrez to Zwindá Terán regarding a site visit to Checkpoint Caribbean. Exhibit 10.

**Question 11**

List and fully describe all waste streams generated from the Company's operations, including solid, liquid, or any other type of waste.

**Response to Question 11**

According to the documents obtained, Checkpoint Caribbean's manufacturing waste stream contained ferric chloride, aluminum chloride, and muriatic acid (hydrochloric acid and water), and at least in one occasion sludge removed from three on-site lined surface impoundments. Other wastes managed according to the documents were wastewater from scrubbers and process trenches, acid fumes, empty drums, and aluminum shavings. See Exhibit 8 Section 1.2 and Table 1-4-1.

**Question 12**

Describe in detail the handling, storage, and disposal practices employed by the Company for each waste stream resulting from the Company's operations.

**Response to Question 12**

According to the information obtained, the wastewater generated from Checkpoint Caribbean's manufacturing process was initially discharged into two on-site lined surface impoundments, Lagoons A and B prior to October 1983. These lagoons were lined with chlorinated polyethylene fabric layers with a total thickness of 36 mils (1). A trial evaporation pond, also lined, was used for less than one week to store wastewaters. The lagoons were originally intended as evaporation ponds. Rain in the area increased the volume of liquid stored in the lagoons, and a lawsuit against Checkpoint Caribbean filed by an adjacent neighbor alleging excessive equipment corrosion prompted Checkpoint Caribbean to close the lagoons by January 1984. See Exhibit 8 Section 1.2. These lagoons were closed with the approvals of the



Puerto Rico Environmental Quality Board and the EPA, per EPA's Closure Certification issued on November 12, 1987. See EPA letter of November 12, 1987 issued to the PREQB re: Closure Certification Checkpoint Systems of Puerto Rico, Inc. Exhibit 12. Before closing the lagoons, in August 1983, Checkpoint Caribbean installed two 12,000 gallon fiberglass aboveground storage tanks to replace the evaporation lagoons. One tank stored used ferric chloride which was recycled back into the process after addition of fresh ferric chloride solution. The other tank stored waste ferric to be hauled off-site. See Exhibit 8 Section 1.2. Also, according to the documents obtained, an approximate volume of 10,000 gallons of waste water was hauled from Checkpoint Caribbean by Servicios Carbareón every two weeks, and according to the facility manager, were taken to the U.S. mainland for sale to wastewater treatment facilities for use as a flocculant. See Exhibit 8 Section 1.2.

### Question 13

Identify all individuals who had responsibility for the Company's environmental and waste management decisions between 1975 and 1999 (e.g., responsibility for decisions regarding the disposal, treatment, storage, recycling, or sale of the Company's hazardous substances, hazardous wastes, and industrial wastes).

- a. Provide each such individual's job title, duties, dates performing those duties, supervisors for those duties, current position, and if applicable, the date of the individual's resignation or termination.
- b. Provide the nature or the information possessed by each such individual concerning the Company's waste management.

### Response to Question 13

Checkpoint Caribbean currently does not have information to formulate a response regarding the decision-making authority of any particular individual from Checkpoint Caribbean with responsibility for the company's environmental waste management decisions between 1975 and 1999. However, Checkpoint Caribbean has identified from the documents and correspondence obtained from EPA and PRIDCO certain individuals and their job title with Checkpoint Caribbean. The following is a list of the individuals Checkpoint Caribbean has identified from the aforementioned documents review. Except for the dates of Mr. Sol L. Colón below, the dates following each individual's name refer to the date of the document where the individual's name was obtained from. Other than the response herein, Checkpoint Caribbean currently does not have information as to formulate the rest of the response.

- a. Sol L. Colón, P.E.  
1971-1979 Director Facilities and Environmental – Checkpoint Systems of PR  
-Manage Utilities Operation and Maintenance  
-Manage the Environmental Program  
-Manage New Equipment Procurement and Installation  
1997-2002 Director Chemical Operations for Checkpoint Systems of PR  
-Manage Start Up of New Chemical Plant  
-Manage Chemical Plant and Chemical Recovery System  
-Manage Plant Environmental Program



Luis A. Aguilera – General Manager Checkpoint Systems of PR Inc.  
Appearing in documents obtained at least from March 1987 to May 1991

Héctor Domínguez – Project Manager - Checkpoint Systems of PR Inc.  
Appearing in document from March 1989

Héctor Domínguez – Unknown position but signing a lease agreement for Checkpoint Systems of PR Inc., with PRIDCO on April of 1998.

- b. Checkpoint Caribbean currently does not have information to formulate a response to this question in connection with Checkpoint Caribbean.

#### Question 14

For each type of hazardous substance, hazardous waste, and industrial waste used or generated by the Company, describe the Company's agreements or other arrangements for its disposal, treatment, storage, recycling, or sale.

- a. Provide any agreement and document, including waste logs, journals, manifests, or notes, related to any transfer of hazardous substances, hazardous wastes, and industrial wastes from the Company's Facility that came to be located at the Site.
- b. Provide all correspondence and written communications between the Company and each owner/operator of the Site regarding the Company's hazardous substances, hazardous wastes, and industrial wastes that came to be located at the Site.

#### **Response to Question 14**

Except for the response in item (a) below, Checkpoint Caribbean currently does not have any documents or information to formulate a response to this question.

- a. Except for a copy of what appears to be an EQB Uniform Hazardous Waste Manifest, No. 00191 dated August 16, 1985, which EPA included as Attachment D of the Request for Information, and included herein as Exhibit 14-A, Checkpoint Caribbean currently does not have any document to formulate a response to this question.
- b. Checkpoint Caribbean currently does not have any document to formulate a response to this question in connection with Checkpoint Caribbean.

#### Question 15

Provide agreements and documents related to the following, including waste logs, journals, manifests, or notes, as set forth below:

- a. The locations where the Company sent each type of hazardous substance, hazardous waste, and industrial waste for disposal, treatment, or recycling:
- b. List all Waste Transporters used by the Company:
- c. For each type of hazardous substance, hazardous waste, and industrial waste, specify which Waste Transporter picked it up:



- d. For each type of hazardous substance, hazardous waste, and industrial waste, state how frequently each Waste Transporter picked up such waste;
- e. For each type of hazardous substance, hazardous waste, and industrial waste, provide the volume picked up by each Waste Transporter (per week, month, or year);
- f. For each type of hazardous substance, hazardous waste, and industrial waste, identify the dates (beginning & ending) such waste was picked up by each Waste Transporter;
- g. Indicate the ultimate location for each type of hazardous substance, hazardous waste, and industrial waste. Provide all documents indicating the ultimate disposal/recycling/treatment location for each type of hazardous substance, hazardous waste, and industrial waste;
- h. Describe how the Company managed pickups of each hazardous substance, hazardous waste, and industrial waste including but not limited to:
  - i. The method for inventorying each type of hazardous substance, hazardous waste, and industrial waste;
  - ii. The method for requesting each type of hazardous substance, hazardous waste, and industrial waste to be picked up;
  - iii. The identity of the Waste Transporter employee/agent contacted for pickup of each type of hazardous substance, hazardous waste, and industrial waste; and
  - iv. The amount paid or the rate paid for the pickup of each type of hazardous substance, hazardous waste, and industrial waste;
- i. Identify the individual or organization that selected the location where each of the Company's wastes were taken. Describe the basis for and provide any documents supporting the answer to this Request.

#### **Response to Question 15**

Except for the copy of, and the information contained in the manifest referenced in the Response to Question 14(a) above and included as Exhibit 14-A herein, Checkpoint Caribbean currently does not have any documents to formulate a response to items (a) to (i) of this question 15 in connection with Checkpoint Caribbean.

#### **Question 16**

If not already provided, specify the dates and circumstances when the Company's hazardous substances, hazardous wastes, and/or industrial wastes were sent, brought, or moved to the Site, and identify the names, address, and telephone numbers of the person(s) making arrangements for the containers (e.g., 55-gallon drum, dumpster, etc.) holding hazardous substances, hazardous wastes, and/or industrial wastes to be sent, brought, or transported to the Site. Please also provide all documents that support or memorialize the answer to this Request.

#### **Response to Question 16**

Checkpoint Caribbean currently does not have any documents to formulate a response to this question in connection with Checkpoint Caribbean.



**Question 17**

Identify, describe, and provide all documents that refer or relate to the following:

- a. The nature, including the chemical content, characteristics, physical state (e.g., solid, liquid), and quantity (volume and weight) of all hazardous substances, hazardous wastes, and industrial wastes involved in each arrangement transferring material from any facility owned or operated by the Company (including the Facility) to any other facility;
- b. In general terms, the nature and quantity of the non-hazardous substances involved in each such arrangement;
- c. The hazardous substances being mixed or combined with other hazardous substances or non-hazardous substances for each arrangement. Indicate whether such mixing or combining is common in the industry. Indicate whether the Company was ever asked to stop mixing or combining the hazardous substances with the non-hazardous substances;
- d. Other materials other than the hazardous substances that were involved in the transaction;
- e. The condition of the transferred material containing hazardous substances when it was stored, disposed of, treated, or transported for disposal or treatment;
- f. The markings on and type, condition, and number of containers in which the hazardous materials were contained when they were stored, disposed, treated, or transported for disposal or treatment; and
- g. All tests, analyses, analytical results, and manifests concerning each hazardous substance, hazardous waste, and industrial waste involved in each transaction. Include information regarding who conducted the test and how the test was conducted (batch sampling, representative sampling, splits, composite, etc.)

**Response to Question 17**

Checkpoint Caribbean had permit GDA-93-408-022 for the discharge of industrial waste water through the Puerto Rico Aqueduct and Sewer Authority's ("PRASA") system. The permit was active at least from March 18, 1997 to March 22, 1998, whose legal name during said period was Checkpoint Systems de Puerto Rico, Inc. See Exhibit 17-A. Reference to this permit was found on the document included in Exhibit 17-A. Checkpoint Caribbean currently does not have a copy of said permit and does not have information on the date when Checkpoint Caribbean started discharging industrial waste waters into PRASA's system or the timeframe covered by said permit.

**Question 18**

Indicate how long the Company has had a relationship with the owner(s) and/operator(s) of the Site.

**Response to Question 18**

Checkpoint Caribbean currently does not have any documents or information to formulate a response to this question in connection with Checkpoint Caribbean.



**Question 19**

Identify any individuals, including former and current employees, who may be knowledgeable of the Company's operations and practices concerning the handling, storage, and disposal of hazardous substances.

**Response to Question 19**

In addition to the individuals listed in response to Question 13 above, Checkpoint Caribbean has been able to identify the former officers or employees: James Lucania, Bryan Rowland, Joseph Driscoll, Luis Soler and Pedro Gonzalez of Checkpoint Caribbean. However, Checkpoint Caribbean does not have information on whether these individuals were knowledgeable of its operations and practices concerning the handling, storage and disposal of hazardous substances.

**Question 20**

Please provide all documents, if not already requested above, that support your responses to Request #1 - #19, above.

**Response to Question 20**

Exhibits were attached to each question, as applicable.

**Question 21**

If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. If the records were destroyed, provide us with the following:

- a. The Company's document retention policy between 1975 and 2018;
- b. A description of how the records were destroyed (burned, trashed, etc.) and the approximate date of destruction;
- c. A description of the type of information that would have been contained in the documents;
- d. The name, job title, and most current address known by you of the person(s) who would have produced these documents, the person(s) who would have been responsible for the retention of these documents, the person(s) who would have been responsible for the destruction of these documents, and the person(s) who had and/or still may have that originals or copies of these documents; and
- e. The names and most current address of any person(s) who may possess documents relevant to this inquiry.

**Response to Question 21**

Checkpoint Caribbean currently does not have any documents or information to formulate a response to this question in connection with Checkpoint Caribbean.



Question 22

Please provide copies of the Company's financial statements, shareholder's reports, financial audits, or other financial reports showing its assets, profits, liabilities, and current financial status for the last five years.

**Response to Question 22**

Checkpoint Caribbean currently does not have information on Checkpoint Caribbean to respond to this question.

Question 23

List and provide a copy of all agreements or contracts, including but not limited to insurance policies and indemnification agreements, held or entered into by the Company or its parent corporation(s), subsidiary, or subsidiaries that could indemnify it against any liability that it may have under CERCLA for releases or threatened releases of hazardous substances at and from the Facility. In response to this Request, please provide not only those insurance policies and agreements that currently are in effect, but also provide those that were in effect during the period(s) when any hazardous substances, hazardous wastes, and/or industrial wastes may have been released or threatened to be released into the environment at or from the Facility.

**Response to Question 23**

Checkpoint Caribbean currently does not have information to formulate a response to this question in connection with Checkpoint Caribbean.

Question 24

State whether any claim or claims have been made by the Company to any insurance company for any loss or damage related to operation at the Site, and if so, identify each claim by stating the name of the claimant, the name and address of the insurance company, the policy number, the named insured on the policy, claim number, date of claim, amount of claim, the specific loss or damage claimed, the current status of the claim, and the amount, date, and recipient of any payment made on the claim.

**Response to Question 24**

Checkpoint Caribbean currently does not have information to formulate a response to this question in connection with Checkpoint Caribbean.

Question 25

If you have reason to believe that there may be persons able to provide a more detailed or complete response to any question contained herein or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.



**Response to Question 25**

Checkpoint Caribbean does not currently have information to respond to this question.

**Question 26**

State the name, title, and address of each individual who assisted or was consulted in the preparation of the response to this Request for Information. In addition, state whether this person has personal knowledge of the information in the answers provided.

**Response to Question 26**

The information provided by the persons below was limited to gathering documents used to respond to the Request for Information, and they have no substantive knowledge of the information contained in those documents and in the answers provided.

Mark McClendon, Vice- President & General Counsel  
CCL Industries Inc.  
17700 Foltz Parkway, Strongsville, OH 44149

Douglas Ulrich, Vice President, Facilities Engineering Worldwide  
CCL Industries Inc.  
17700 Foltz Parkway, Strongsville, OH 44149

In addition, the following persons assisted in the preparation of this response in their capacity as counsels of Checkpoint Caribbean, Checkpoint Systems, and CCL, and do not have personal knowledge of the information contained in the documents used to respond and in the answers provided.

Salvador Casellas-Toro  
Jorge J García-Díaz  
Ignacio Vidal  
McConnell Valdés LLC  
270 Muñoz Rivera Ave.  
San Juan, Puerto Rico 00918



## APPENDIX A

### General Objections / Preservations of Rights

General Objection No. 1: Checkpoint Caribbean objects to the Request for Information to the extent that it exceeds the authority granted to the U.S. Environmental Protection Agency under Section 104(e) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §9604(e).

General Objection No. 2: Checkpoint Caribbean objects to the Request for Information to the extent that it seeks information not relevant to the purposes stated in the EPA letter dated March 28, 2019, regarding CERCLA Section 104(e).

General Objection No. 3: Checkpoint Caribbean objects to the Request for Information as overly broad, unreasonable in scope, vague, and unduly burdensome.

General Objection No. 4: Checkpoint Caribbean objects to the Request for Information to the extent that it calls for legal conclusions.



CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

State/Commonwealth of Ohio

County/Municipality of Cuyahoga

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information) and all documents submitted herewith, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the extent that such information is available to Checkpoint Caribbean, Checkpoint Systems, and CCL as of the date of this response, and that to the best of my knowledge all documents submitted herewith are complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that I am under a continuing obligation to supplement my response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information or my response thereto should become known or available to me.

MARK MCCLENDON  
NAME (print or type)

V.P. General Counsel  
TITLE (print or type)

Mark McCleendon  
SIGNATURE

Sworn to before me this

7th day of June 2019.

Notary Public

[Signature]



Monika P. Lutsen, Attorney At Law  
NOTARY PUBLIC - STATE OF OHIO  
My commission has no expiration date  
Sec.147.03 R.C.





## Search Report

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**Entity Name :** Checkpoint Caribbean Ltd.  
**Jurisdiction :** Cayman Islands  
**Registration Number :** 155147  
**Registration Date :** 20th September 2005  
**Entity Type :** EXEMPT  
**Registered Office :** INTERTRUST CORPORATE SERVICES (CAYMAN) LIMITED  
190 Elgin Avenue  
George Town  
Grand Cayman KY1-9005  
Cayman Islands

<b>Status :</b>	ACTIVE
<b>Status Date :</b>	20th September 2005

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- INFORMATION REGARDING THE CORPORATE RECORDS AND REGISTERS ARE NOT AVAILABLE FOR PUBLIC INSPECTION
- THIS REPORT DOES NOT CONFIRM THE ENTITY IS IN GOOD STANDING



**PENNSYLVANIA DEPARTMENT OF STATE  
BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS**

☐ Return document by mail to:

CSC order #141226-5

Name

WY

**Statement of Merger**



TCO160513JD0509

Corporation Service Company

(xx)Return document by email to: cscpa@cscinfo.com

Read all instructions prior to completing.

Fee: \$70 plus \$40 for *each* association that is a party to the merger  
The minimum amount to be submitted with this filing is \$150

In compliance with the requirements of the applicable provisions of 15 Pa.C.S. § 335 (relating to Statement of merger), the undersigned, desiring to effect a merger, hereby states that:

**A. For the surviving association:**

1. The name of the surviving association is: Checkpoint Systems, Inc.
2. The jurisdiction of formation of the surviving association: Pennsylvania
3. The type of association of the surviving association is (check only one):
  - ☒ Business Corporation
  - ☐ Nonprofit Corporation
  - ☐ Limited Liability Company
  - ☐ Limited Partnership
  - ☐ Limited Liability (General) Partnership
  - ☐ Limited Liability Limited Partnership
  - ☐ Business Trust
  - ☐ Professional Association
  - ☐ Other \_\_\_\_\_

2016 MAY 13 AM 10: 51

COMM OF PA  
DEPT OF STATE



DSCB:15-335-2

## 4. The surviving association is a (check only one box, provide address and follow instructions for attachments):

- ☒ Domestic (Pennsylvania) filing entity already in existence on Department of State records  
*If applicable, attach to this Statement any amendment to its public organic record approved as part of the plan of merger.*
- ☐ NEW domestic (Pennsylvania) filing entity (includes limited liability limited partnership)  
*Attach to this Statement the public organic record of the new entity.*
- ☐ Foreign filing association or foreign limited liability partnership already registered with the Department.  
*If applicable, attach to this Statement any amendment to or transfer of its foreign registration approved as part of the plan of merger.*
- ☐ Foreign filing association or foreign limited liability partnership simultaneously seeking registration with the Department of State  
*Attach to this Statement a completed form DSCB:15-412 (Foreign Registration Statement) with applicable fee and attachments.*

Its current registered office address. Complete part (a) OR (b) – not both:

(a) \_\_\_\_\_  
Number and street City State Zip County

(b) c/o: CT Corporation System; Philadelphia County  
Name of Commercial Registered Office Provider County

- ☐ NEW domestic (Pennsylvania) limited liability partnership or electing partnership  
*Attach completed DSCB:15-8201 (Statement of Registration) or DSCB:15-8701A (Statement of Election)*
- ☐ Domestic association that is not a domestic filing association  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its principal office:

\_\_\_\_\_  
Number and street City State Zip County

- ☐ Foreign association that is not, and will not, be registered with the Department of State  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its registered or similar office, if any, required to be maintained by the law of its jurisdiction of formation; or if it is not required to maintain a registered or similar office, its principal office:

\_\_\_\_\_  
Number and street City State Zip



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Days	Control (%)	100 mg/kg (%)	200 mg/kg (%)	400 mg/kg (%)
0	100	100	100	100
2	100	98	95	60
4	100	99	98	75
6	100	100	100	78
8	100	100	100	80
10	100	100	100	80
12	100	100	100	80
14	100	100	100	80

the system, the

100



DSCB:15-335-4

**C. Effective date of statement of merger (check, and if appropriate complete, one of the following):**☒ This Statement of Merger shall be effective upon filing in the Department of State.☐ This Statement of Merger shall be effective on: \_\_\_\_\_ at \_\_\_\_\_  
Date (MM/DD/YYYY) Hour (if any)**D. Approval of merger by merging associations (check all applicable statement(s)):**☒ For domestic entities – The merger was approved in accordance with 15 Pa.C.S. Chapter 3, Subchapter C (relating to merger).☐ For foreign associations – The merger was approved in accordance with the laws of the jurisdiction of formation.☐ For domestic associations that are not domestic entities – The merger was approved by the interest holders of the merging association in the manner required by its organic law.**E. Attachments (see Instructions for required and optional attachments).**IN TESTIMONY WHEREOF, the undersigned merging associations have caused this Statement of Merger to be signed by duly authorized officers thereof this 13th day of May, 20 16.Checkpoint Systems, Inc.Name of Merging AssociationBryan Rowland  
SignatureVP, General Counsel, Secretary  
TitleCCL Industries USA Corp.Name of Merging AssociationMark McCall  
SignatureVP General Counsel  
Title



☐ Return document by mail to:

Name

**Address**

City

State

**Zip Code**☐ Return document by email to:

**Domestic Corporation**

DSCB:15-1915/5915 (rev. 7/2015)



1915

Read all instructions prior to completing. This form may be submitted online at <https://www.corporations.pa.gov/>.

Check one: ☒ Business Corporation (§ 1915) ☐ Nonprofit Corporation (§ 5915)

In compliance with the requirements of the applicable provisions (relating to articles of amendment), the undersigned, desiring to amend its articles, hereby states that:

**1. The name of the corporation is:**

**Checkpoint Systems, Inc.**

2. The (a) address of this corporation's current registered office in this Commonwealth or (b) name of its commercial registered office provider and the county of venue is:

(Complete only (a) or (b), not both)

**(a) Number and Street**

City

State

**Zip**

County

**(b) Name of Commercial Registered Office Provider**

County

**c/o: CT Corporation System; Philadelphia County**

3. The statute by or under which it was incorporated: Business Corporation Law of 1933

4. The date of its incorporation: 07/17/1969

(MM/DD/YYYY)

5. Check, and if appropriate complete, one of the following:

✓ The amendment shall be effective upon filing these Articles of Amendment in the Department of State.

\_\_\_\_ The amendment shall be effective on: \_\_\_\_\_ at \_\_\_\_\_  
Date (MM/DD/YYYY) Hour (if any)



DSCB:15-1915/5915-2

## 6. Check one of the following:

☒ The amendment was adopted by the shareholders or members pursuant to 15 Pa.C.S. § 1914(a) and (b) or § 5914(a).

☐ The amendment was adopted by the board of directors pursuant to 15 Pa. C.S. § 1914(c) or § 5914(b).

## 7. Check, and if appropriate complete, one of the following:

☐ The amendment adopted by the corporation, set forth in full, is as follows

☒ The amendment adopted by the corporation is set forth in full in Exhibit A attached hereto and made a part hereof.

## 8. Check if the amendment restates the Articles:

☒ The restated Articles of Incorporation supersede the original articles and all amendments thereto.

IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by a duly authorized officer thereof this

13th day of May, 2016

Checkpoint Systems, Inc.

Name of Corporation

Signature

Title



**EXHIBIT A**


**AMENDED AND RESTATED  
ARTICLES OF INCORPORATION  
OF  
CHECKPOINT SYSTEMS, INC.**

**(a Pennsylvania Business-stock corporation §1306)**

1. The name of the corporation is Checkpoint Systems, Inc.
2. The name of this corporation's commercial registered office provider and the county of venue is: c/o Corporation Service Company, Dauphin County.
3. The corporation is incorporated under the provisions of the Business Corporation Law of 1988.
4. The corporation is organized on a stock share basis and the aggregate number of shares authorized is 1,000 common shares.



PENNSYLVANIA DEPARTMENT OF STATE  
BUREAU OF CORPORATIONS AND CHARITABLE ORGANIZATIONS

<input checked="" type="checkbox"/> Return document by mail to: Michael J. Jones, Warner Norcross & Judd LLP Name 900 Fifth Third Center, 111 Lyon St. NW Address Grand Rapids MI 49503 City State Zip Code <input checked="" type="checkbox"/> Return document by email to: <u>mjones@wnj.com</u>	Statement of Merger DSCB:15-335  TML161220MC1059
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Read all instructions prior to completing.

Fee: \$70 plus \$40 for *each* association that is a party to the merger  
The minimum amount to be submitted with this filing is \$150

In compliance with the requirements of the applicable provisions of 15 Pa.C.S. § 335 (relating to Statement of merger), the undersigned, desiring to effect a merger, hereby states that:

**A. For the surviving association:**

1. The name of the surviving association is: Checkpoint Systems, Inc.
2. The jurisdiction of formation of the surviving association: Pennsylvania
3. The type of association of the surviving association is (check only one):
  - ☒ Business Corporation
  - ☐ Nonprofit Corporation
  - ☐ Limited Liability Company
  - ☐ Limited Partnership
  - ☐ Limited Liability (General) Partnership
  - ☐ Limited Liability Limited Partnership
  - ☐ Business Trust
  - ☐ Professional Association
  - ☐ Other \_\_\_\_\_

2016 DEC 19 PM 2: 19

PA. DEPT. OF STATE



DSCB:15-335-2

## 4. The surviving association is a (check only one box, provide address and follow instructions for attachments):

- ☒ Domestic (Pennsylvania) filing entity already in existence on Department of State records  
*If applicable, attach to this Statement any amendment to its public organic record approved as part of the plan of merger.*
- ☐ NEW domestic (Pennsylvania) filing entity (includes limited liability limited partnership)  
*Attach to this Statement the public organic record of the new entity.*
- ☐ Foreign filing association or foreign limited liability partnership already registered with the Department.  
*If applicable, attach to this Statement any amendment to or transfer of its foreign registration approved as part of the plan of merger.*
- ☐ Foreign filing association or foreign limited liability partnership simultaneously seeking registration with the Department of State  
*Attach to this Statement a completed form DSCB:15-412 (Foreign Registration Statement) with applicable fee and attachments.*

Its current registered office address. Complete part (a) **OR** (b) – not both:

- (a) \_\_\_\_\_  
Number and street City State Zip County
- (b) c/o: Corporation Service Company; Dauphin  
Name of Commercial Registered Office Provider County

- ☐ NEW domestic (Pennsylvania) limited liability partnership or electing partnership  
*Attach completed DSCB:15-8201 (Statement of Registration) or DSCB:15-8701A (Statement of Election)*
- ☐ Domestic association that is not a domestic filing association  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its principal office:

\_\_\_\_\_

Number and street City State Zip County

- ☐ Foreign association that is not, and will not, be registered with the Department of State  
*Attach to this Statement tax clearance certificates.*

The address, including street and number, if any, of its registered or similar office, if any, required to be maintained by the law of its jurisdiction of formation; or if it is not required to maintain a registered or similar office, its principal office:

\_\_\_\_\_

Number and street City State Zip



**B. For the merging association(s) that are not surviving the merger:**

3. The type of association is (check only one):
- |   |  |   |
|---|--|---|
| <input checked="checked" type="checkbox"/> Business Corporation | <input type="checkbox"/> Limited Partnership                     | <input type="checkbox"/> Business Trust           |
| <input type="checkbox"/> Nonprofit Corporation                  | <input type="checkbox"/> Limited Liability (General) Partnership | <input type="checkbox"/> Professional Association |
| <input type="checkbox"/> Limited Liability Company              | <input type="checkbox"/> Limited Liability Limited Partnership   | <input type="checkbox"/> Other _____              |

**If the merging association is a domestic filing association, domestic limited liability partnership or registered foreign association, the current registered office address as on file with the Department of State.**  
*Complete part (a) OR (b) – not both:*

**Use Statement of Merger – Addendum (DSCB:15-335AD)**  
for additional merging parties that are not surviving the merger.



DSCB:15-335-4

**C. Effective date of statement of merger** (check, and if appropriate complete, one of the following):

- ☐ This Statement of Merger shall be effective upon filing in the Department of State.
- ☒ This Statement of Merger shall be effective on: 01/01/2017 at 12:00 a.m.  
Date (MM/DD/YYYY) Hour (if any)

**D. Approval of merger by merging associations** (check all applicable statement(s)):

- ☒ For domestic entities – The merger was approved in accordance with 15 Pa.C.S. Chapter 3, Subchapter C (relating to merger).
- ☒ For foreign associations – The merger was approved in accordance with the laws of the jurisdiction of formation.
- ☐ For domestic associations that are not domestic entities – The merger was approved by the interest holders of the merging association in the manner required by its organic law.

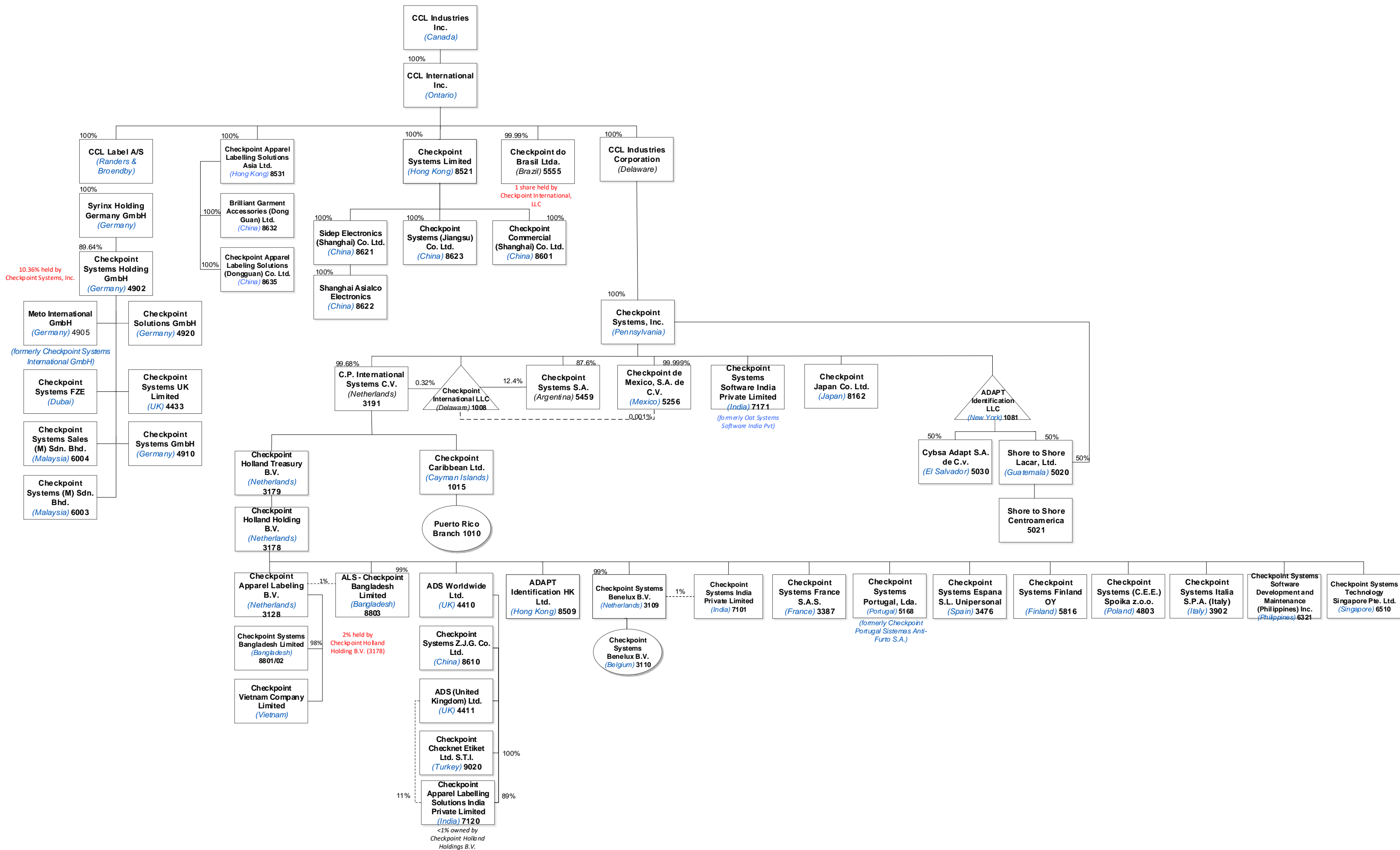
**E. Attachments** (see Instructions for required and optional attachments).

IN TESTIMONY WHEREOF, the undersigned merging associations have caused this Statement of Merger to be signed by duly authorized officers thereof this 15<sup>th</sup> day of December, 20 16.

OATSystems, Inc.Name of Merging AssociationSuzana FurtadoSignatureSuzana Furtado, SecretaryTitleCheckpoint Systems, Inc.Name of Merging AssociationSean WashchukSignatureSean Washchuk, TreasurerTitle



CHECKPOINT SYSTEMS, INC.  
AND ITS SUBSIDIARIES  
APRIL 1, 2019







ESTADO LIBRE ASOCIADO DE PUERTO RICO

COMPANIA DE FOMENTO INDUSTRIAL DE PUERTO RICO  
PO BOX 362350 SAN JUAN PR 00936-2350

FAX: (809) 250-1599

18 de noviembre de 1991

A : Sr. Pedro José Rivera  
P/C : Sr. Tomás Sanabria *TS*  
DE : *Rafael Gutiérrez*  
ASUNTO: Checkpoint Systems de P.R.  
Edificio: M-1216-0-78-03  
Solar: L-306(A)-72  
Ponce, Puerto Rico  
Caso: 91I-138

A solicitud del Departamento de Contratos, el 14 de octubre de 1991 reinspeccionamos la propiedad indicada en el asunto.

La solicitud obedece a la cancelación del contrato de arrendamiento.

Respondiendo a ésta, hemos evaluado la situación ambiental de la propiedad. En esta evaluación consideramos las siguientes reglamentaciones estatales y federales:

- Ley Federal de Conservación y Recuperación de los Recursos (RCRA).
- \*Reglamento para el Control de los Desperdicios Sólidos Peligrosos y no Peligrosos (versión enmendada).
- \*Reglamento para el Control de la Inyección Subterránea.
- \*Reglamento para el Control de la Contaminación Atmosférica (versión enmendada)
- Prevención de Contaminación de Aceites, Código Registro Federal 40, Parte 112.
- "PCB bajo TSCA".
- Reglamento para el Aprovechamiento, Uso, Conservación y Administración de las Aguas de Puerto Rico del Departamento de Recursos Naturales de Puerto Rico.
- Reglamento del Departamento de Bomberos de Puerto Rico-Area de Prevención.
- Ley de Desperdicios Médicos (Código Registro Federal 40, Partes 22 y 259).
- Reglamento para Tanques Soterrados.

\*Promulgado por la Junta de Calidad Ambiental (JCA)



Sr. Pedro J. Rivera  
Re: Checkpoint Systems  
18 de noviembre de 1991  
Página 2

#### INFORMACION GENERAL

El edificio M-1216-0-78-03 está localizado en el solar L-306(A)-72 en la Calle 1, Barrio Sabanetas, Urb. Industrial en Ponce, Puerto Rico (Anejo 1, incluye copia del plano de localización y sitio del proyecto).

#### HISTORIAL DE USO DE LA PROPIEDAD

El edificio fue terminado el 2 de diciembre de 1979.

Compañía : Checkpoint Systems de P.R., Inc.  
Desde : 21 de febrero de 1979  
Hasta : 30 de septiembre de 1991  
Producto : Circuitos electrónicos

#### COLINDANCIAS

Las colindancias a la propiedad son las siguientes:

NORTE : Solar L-306-72 Edificio: M-1380-0-86  
Refiérase al Anexo 2, el cual incluye un Historial de  
Uso de la propiedad.

SUR : Solar L-306-72 Edificio: T-1266-0-79  
Refiérase al Anexo 2, el cual incluye un Historial de  
Uso de la propiedad.

ESTE : Carretera P.R. 52

OESTE : Calle 1 del parque industrial

Por la naturaleza de las operaciones llevadas a cabo en estas propiedades, opinamos que se utilizaron sustancias con características tóxicas, y fueron catalogadas como generadores de desperdicios peligrosos, según archivos de la JCA.

De acuerdo a información suministrada por la JCA no existe querrela registrada en sus expedientes contra los ocupantes de estas propiedades investigadas.



Sr. Pedro J. Rivera  
Re: Checkpoint Systems  
18 de noviembre de 1991  
Página 3

#### INFORMACION ESPECIFICA DEL PROYECTO

Durante la reinspección al proyecto evaluamos las siguientes áreas:

1. Interior del edificio
2. Patio delantero
3. Patio posterior
4. Zona de carga y descarga

En el momento de la inspección **NO** observamos:

-Desperdicios sólidos peligrosos en violación a la reglamentación estatal y federal (Reglamento para el Control de los Desperdicios Sólidos Peligrosos y no Peligrosos, versión enmendada y Parte 261 del Código de Registro Federal Núm. 40).

-Fuentes de Emisión Atmosférica de acuerdo a la Reglamentación para el Control de Contaminación Atmosférica de la JCA.

-Tanques sobre el terreno para almacenar materia prima (líquidos), de acuerdo a la Parte 112 del Código de Registro Federal Núm. 40 para la prevención de Contaminación de Aceites.

-Subestaciones eléctricas con transformadores conteniendo PCB regulados, de acuerdo a la Ley para el Control de Substancias Tóxicas (TSCA).

-Pozos de extracción de agua.

-Desperdicios que puedan clasificarse como biomédicos conforme al Código de Registro Federal Núm. 40, Partes 22 y 259.

-Estructuras/planchas de material conteniendo asbesto en la propiedad bajo investigación.

-Tanques sobre el terreno para almacenar materia prima de acuerdo al Reglamento del Departamento de Bomberos de Puerto Rico - Area de Prevención.

-Tanques sobre el terreno de gas en conformidad con la Comisión de Servicio Público.

-Pozos sépticos de acuerdo al Reglamento para el Control de Inyección Subterránea.



Sr. Pedro J. Rivera  
Re: Checkpoint Systems  
18 de noviembre de 1991  
Página 4

El 14 de octubre reinspeccionamos el módulo en el asunto, y observamos que los materiales peligrosos encontrados en la inspección del 6 de agosto habían sido removidos y llevados a las nuevas facilidades de Checkpoint para ser usado en su proceso de manufactura. Por lo tanto se observó el módulo vacío. (Ver informe técnico del 8 de agosto de 1991.)

#### CONCLUSION

Basándonos en la información recopilada, entendemos que NO hay evidencia de riesgos de contaminación ambiental en esta propiedad y sus alrededores. Recomendamos favorablemente la cancelación del contrato de arrendamiento.

#### RECOMENDACIONES

Recomendamos se envíe comunicación al Departamento de Contratos, informándole:

Sobre la disponibilidad total de la propiedad bajo investigación.

Anexos



**ANEXOS**

1. Copia del Plano de Localización de la propiedad bajo consideración.
2. Historial de Uso de los Colindantes del proyecto.



## HISTORIAL DE USO

Propiedad: M-1380-0-86

Módulo 1

Compañía : Envirolabs, Inc.  
Desde : 2 de julio de 1987  
Hasta : Presente  
Producto : Laboratorio ambiental

Módulo 2

Compañía : Envirolabs, Inc.  
Desde : 5 de junio de 1990  
Hasta : Presente  
Producto : Laboratorio ambiental

Módulo 3

Compañía : Security Mfg. Corp.  
Desde : 16 de junio de 1987  
Hasta : Presente  
Producto : Puertas y ventanas de seguridad

Módulo 4

Compañía : Security Mfg. Corp.  
Desde : 16 de junio de 1987  
Hasta : mayo de 1988  
Producto : Puertas y ventanas de seguridad

Compañía : EDA Ponce  
Desde : 7 de enero de 1989  
Hasta : Presente  
Producto : Almacén

Propiedad: T-1266-0-79

Módulo 1

Compañía : Alvarado Aluminio, Inc.  
Desde : 27 de febrero de 1979  
Hasta : septiembre de 1981  
Producto : Puertas y ventanas de aluminio



Cont...ANEXO 02

## HISTORIAL DE USO

Compañía : Checkpoint Systems de P.R., Inc.  
Desde : octubre de 1981  
Hasta : mayo de 1984  
Producto : Circuitos electrónicos

Compañía : Phasor Engineering, Inc.  
Desde : 28 de junio de 1984  
Hasta : Presente  
Producto : Reparaciones transformadores

Módulo 2

Compañía : Wallys Sportwear Mfg. Corp.  
Desde : 28 de junio de 1979  
Hasta : mayo de 1980  
Producto : Uniformes deportivos

Compañía : Super Sport Uniforms Mfg.  
Desde : 28 de agosto de 1980  
Hasta : Presente  
Producto : Uniformes deportivos

Módulo 4

Compañía : Checkpoint Systems de P.R., Inc.  
Desde : 21 de febrero de 1979  
Hasta : Presente  
Producto : Circuitos electrónicos



**GOBIERNO DE PUERTO RICO****Compañía de Fomento Industrial**

16 de enero de 2018

Joel Meléndez Rodríguez

Karen W. Fornés Pérez

Harold Carrasquillo Alberty

**INFORME DE EVALUACION AMBIENTAL**

Lorraine Construction

Edificio M-1216-0-77-03 del L-306-0-66-00

Parque Industrial Sabanetas

Ponce, Puerto Rico

Caso 17-212

A solicitud de la División de Administración de Contratos, visitamos la propiedad citada.

La solicitud obedece a la cancelación del contrato de arrendamiento.

En esta evaluación consideramos las siguientes reglamentaciones estatales y federales:

- Ley Federal de Conservación y Recuperación de los Recursos (RCRA).
- \*Reglamento para el Control de los Desperdicios Sólidos Peligrosos y No Peligrosos (Versión enmendada).
- \*Reglamento para el Control de la Inyección Subterránea.
- \*Reglamento para el Control de la Contaminación Atmosférica (versión enmendada).
- \*Prevención de Contaminación de Aceites, Código Registro Federal 40, Parte 112.
- “PCB bajo TSCA”
- Reglamento para el Aprovechamiento, Uso, Conservación y Administración de las Aguas de Puerto Rico del Departamento de Recursos Naturales de Puerto Rico.
- Reglamento del Departamento de Bomberos de Puerto Rico, Área de Prevención.
- Reglamento para el Manejo de los Desperdicios Biomédicos (JCA), agosto 1991.
- Reglamento para Tanques Soterrados.

\*Promulgado por la Junta de Calidad Ambiental (JCA)

**FOMENTO**



Joel Meléndez Rodríguez  
Lorraine Construction  
16 de enero de 2018

### Información General

La propiedad bajo estudio está localizada en el solar 6 del L-306-0-66-00 en la calle 1, en el Parque Industrial Sabanetas en Ponce, Puerto Rico.

### Historial de Uso de la Propiedad

El edificio fue terminado el 2 de diciembre de 1979.

Compañía : Checkpoint Systems de PR, Inc.  
Desde : 21 de febrero de 1979  
Hasta : 30 de septiembre de 1991  
Producto : Circuitos electrónicos

Compañía : Del Mar Pharmacy Services, Inc.  
Desde : 21 de septiembre de 1994  
Hasta : Información no disponible  
Producto : Distribución de productos farmacéuticos

Compañía : Lorraine Construction  
Desde : 7 de mayo de 2007  
Hasta : 1 de octubre de 2017  
Producto : Oficinas

### COLINDANCIAS

Las colindancias del proyecto son las siguientes:

NORTE : Sección 2 del M-1380-0-86-00  
SUR : Edificio T-1266-0-79-00  
ESTE : Sección 4 del M-1216-0-77-00  
OESTE : Sección 2 del M-1216-0-77-00



Joel Meléndez Rodríguez  
Lorraine Construction  
16 de enero de 2018

### **Información Específica del Proyecto/Solar**

*Durante la evaluación del proyecto consideramos las siguientes áreas.*

*Interior del Edificio  
Patio delantero  
Patio posterior  
Zona de carga y descarga*

*En el momento de la inspección realizada el 6 de diciembre de 2017, NO observamos:*

*Desperdicios sólidos almacenados o abandonados que pudieran estar en violación a la reglamentación estatal y federal (Reglamento para el Control de los Desperdicios Sólidos Peligrosos y No Peligrosos, versión enmendada y Parte 261 del Código de Registro Federal Núm. 40).*

*Fuentes de Emisión Atmosférica (Reglamentación para el Control de Contaminación Atmosférica de la JCA).*

*Tanques sobre el terreno para almacenar materia prima (líquidos), (Parte 112 del Código de Registro Federal Núm. 40 para la prevención de Contaminación de Aceites).*

*Pozos de extracción de agua.*

*Desperdicios biomédicos (Código de Registro Federal Núm. 10, partes 22 y 259).*

*Tanques soterrados para almacenamiento (Reglamento de Tanques de Almacenamiento Soterrados).*

*Tanques sobre el terreno para almacenar materia prima (Reglamento del Departamento de Bomberos de Puerto Rico – Área de Prevención de Incendios).*

*Tanques sobre el terreno de gas (Comisión de Servicio Público).*

*Estructuras/planchas de material sospechoso que pudiesen contener asbesto.*

*Pozos sépticos (Reglamento para el Control de la Inyección Subterránea).*





Joel Meléndez Rodríguez  
Lorraine Construction  
16 de enero de 2018

**OBSERVACIONES:**

**Interior del Edificio**

- La empresa utilizaba este local como área de oficinas y almacén de equipo.
- Desocupado y limpio.
- Las divisiones interiores de los baños son de plástico.
- No se observaron manchas o derrames de sustancias químicas.
- En el área de oficinas se observaron losetas de vinilo nuevas.

**Exterior del Edificio**

- En el patio posterior se observó una subestación eléctrica de tres transformadores de 75 KVA cada uno, No-PCB.
- Los alrededores se observaron limpios.

**CONCLUSION**

Basándonos en la información recopilada para efectos de esta evaluación, entendemos que la condición ambiental de la propiedad no debería representar riesgos inaceptables para la disponibilidad de la misma.

**ANEJO**

Copia del Plano de Localización y Sitio del Proyecto bajo consideración.  
Historial de Uso de los Colindantes.  
Fotos

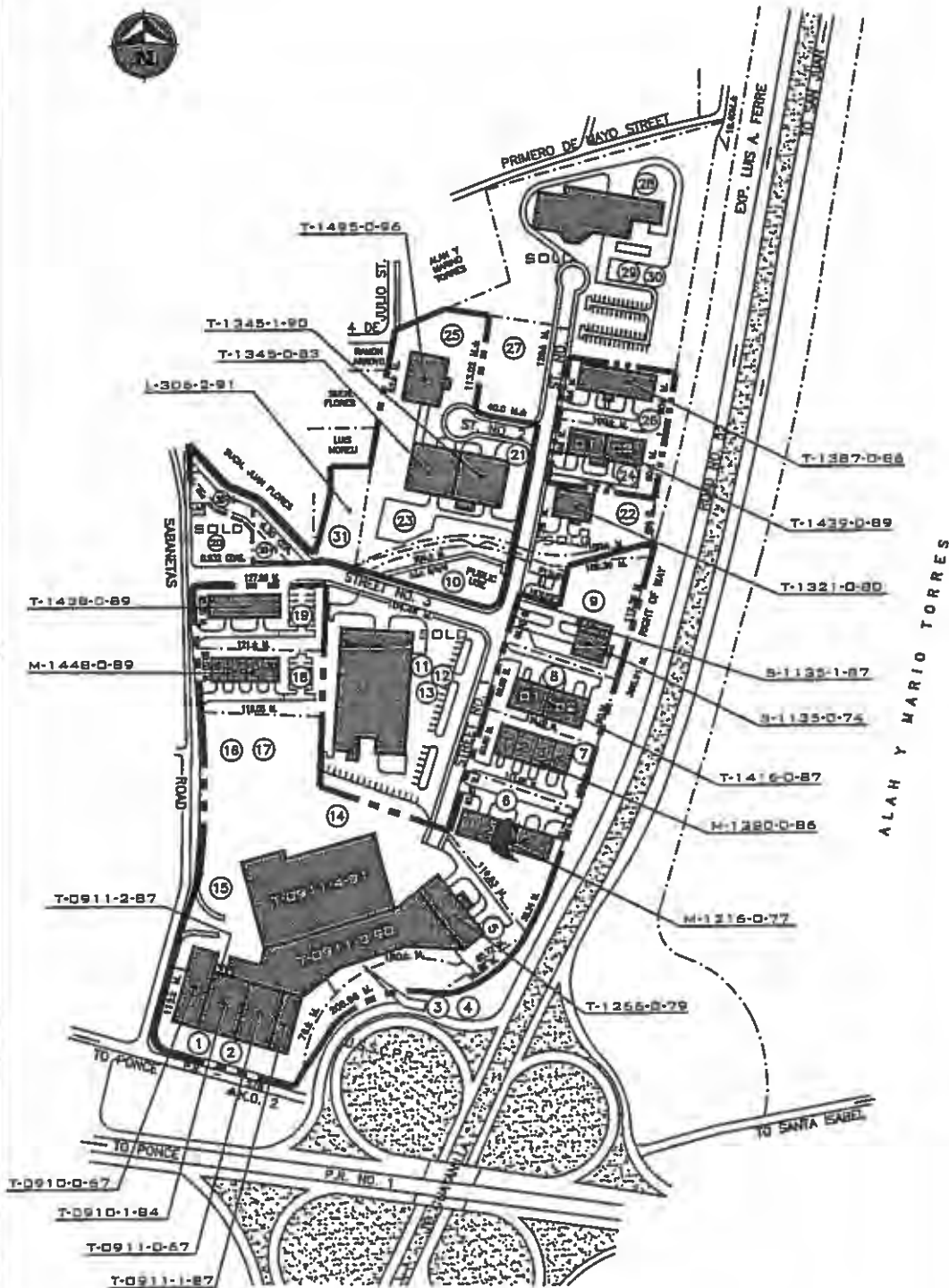


**MUNICIPALITY OF PONCE**  
**SABANETAS INDUSTRIAL SUBDIVISION**

**L-306-0-66-00**

**L-306-1-72-00**

**L-306-2-91-00**



**LEGEND:**

- LOT LIMIT
- PRIDCO PROPERTY LIMIT
- BUILDING
- ROADS OR CURB SIDE

**CADASTRE NUMBER**

MUNICIPALITY	MAP		BLOCK	PARCEL
	1:10,000	1:1,000		
63	389	057-067	006	000

SCALE NOT TO SCALE REV. DATE Octubre - 2016  
 DRAW DATE MAY - 21 - 1975 ZONING D-1 (I-L)



**PRIDCO**



Joel Meléndez Rodríguez  
Lorraine Construction  
16 de enero de 2018

## Historial de Uso de los Colindantes

### Propiedad M-1380-0-86-00 Sección 2

El edificio fue terminado el 30 de julio de 1986.

Compañía	:	Prime Computer, Inc.
Desde	:	1 de septiembre de 1987
Hasta	:	30 de noviembre de 1992
Producto	:	Taller de mecánica
Compañía	:	The Medicine of California, Inc.
Desde	:	12 de enero de 1994
Hasta	:	30 de junio de 1998
Producto	:	Distribución de medicamentos
Compañía	:	Valnet Medical
Desde	:	3 de junio de 1999
Hasta	:	Información no disponible
Producto	:	Productos médicos
Compañía	:	Altol Chemical Environmental Lab., Inc.
Desde	:	1 de junio de 2016
Hasta	:	Presente
Producto	:	Laboratorio ambiental

### Propiedad T-1216-0-79-00

Compañía	:	Checkpoint Systems of PR, Inc.
Desde	:	28 de noviembre de 1980
Hasta	:	16 de enero de 1991
Producto	:	Componentes electrónicos
Compañía	:	USSC PR, Inc.
Desde	:	26 de diciembre de 1991
Hasta	:	Presente
Producto	:	Instrumentos de cirugía





Joel Meléndez Rodríguez  
Lorraine Construction  
16 de enero de 2018

**Propiedad M-1216-0-77-00 Sección 4**

Compañía : Checkpoint Systems of PR, Inc.  
Desde : 21 de febrero de 1979  
Hasta : Información no disponible  
Producto : Alarmas

Compañía : Sucesor, Inc.  
Desde : 24 de mayo de 2002  
Hasta : Presente  
Producto : Mattresses

**Propiedad M-1216-0-77-00 Sección 2**

**El edificio fue terminado el 12 de febrero de 1979.**

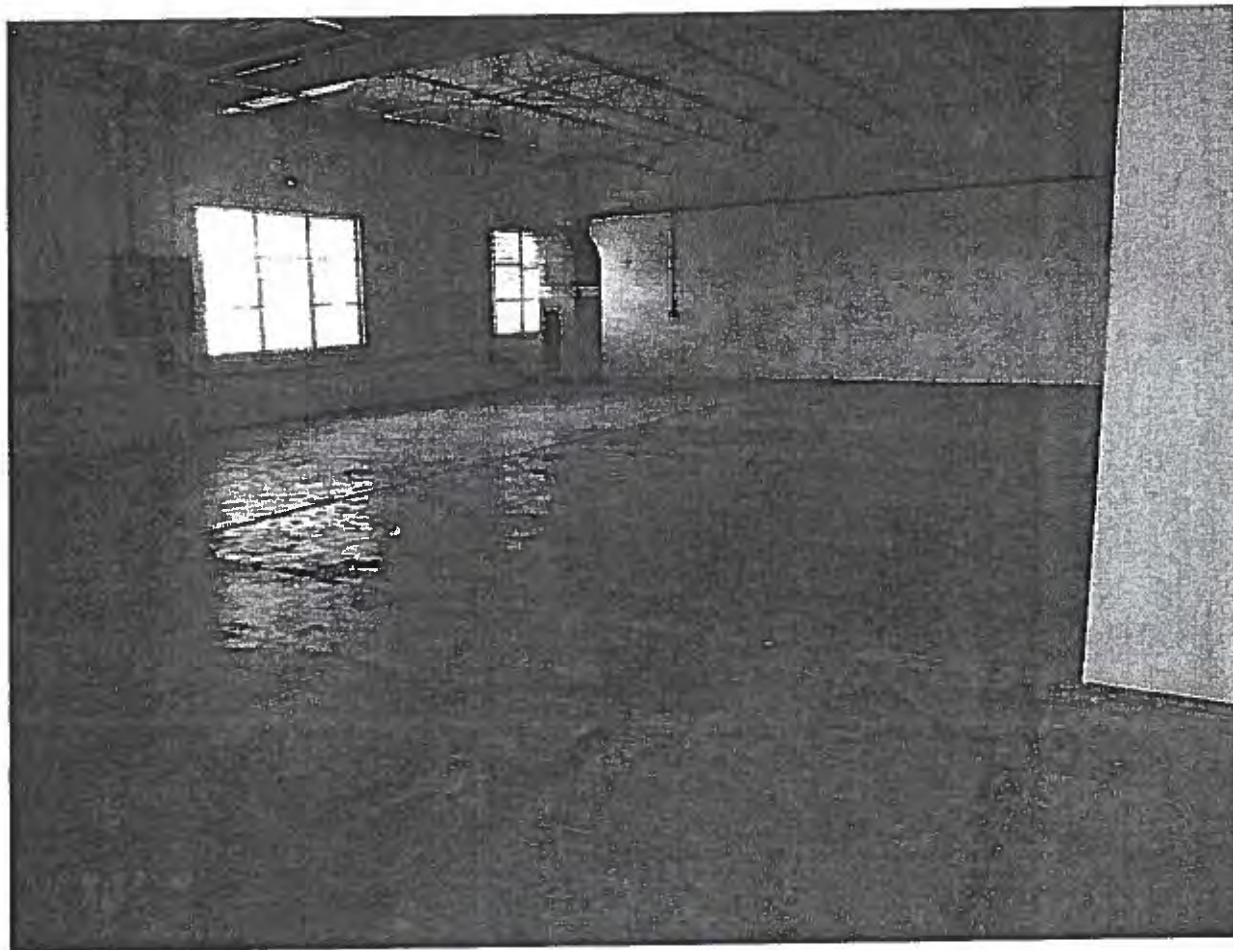
Compañía : Wallys Sportwear Mfg., Corp.  
Desde : 28 de junio de 1979  
Hasta : 28 de junio de 1979  
Producto : Ropa deportiva

Compañía : Super Sports Uniforms Mfg., Inc.  
Desde : 28 de agosto de 1980  
Hasta : enero de 2005  
Producto : Uniformes deportivos

Compañía : Phasor Engineering, Inc.  
Desde : 29 de mayo de 2014  
Hasta : Presente  
Producto : Reconstrucción de transformadores







VISTA INTERIOR M-1216-0-77-03 PONCE





VISTA FRONTAL M-1216-0-77-03 PONCE





PATIO POSTERIOR M-1216-0-77-03 PONCE



OIM/asp

"C"

PUERTO RICO INDUSTRIAL DEVELOPMENT COMPANY  
P. O. BOX 362350  
SAN JUAN, PUERTO RICO 00936-2350

*Rafael*

LEASE CONTRACT

PROJECT NO.: M-1216-0-77-04 y 05

LOCATION: PONCE, PUERTO RICO

THIS AGREEMENT ENTERED into on *April 2, 1998* by:  
as "LANDLORD", THE PUERTO RICO INDUSTRIAL DEVELOPMENT COMPANY, and as  
"TENANT": CHECKPOINT SYSTEMS OF P. R., INC.

WITNESSETH

WHEREAS, LANDLORD is the owner of certain land-site and building, identified in the  
Epigraph, hereinafter referred to as the Premises.

WHEREAS, LANDLORD has agreed to lease to TENANT, and TENANT has agreed to hire  
from LANDLORD the Premises.

NOW THEREFORE, in consideration of the foregoing premises, the parties herein agree on  
this Lease subject to the following:

TERMS AND CONDITIONS

ONE: LANDLORD hereby demises and lets unto TENANT, and TENANT hereby leases  
from LANDLORD the Premises which are fully described in Annex "A" hereto annexed and made a  
part hereof.

The Premises are subject to the encumbrances, liens and/or restrictions, if any, that may appear  
from said Annex "A". Furthermore, the air rights of the Premises, are excepted and reserved to  
LANDLORD.

TWO: Premises shall be used and occupied exclusively in the manufacture of Electrical  
Circuit Labels & Tags (SIC. #03669).

THREE: TENANT shall hold the Premises for a period of five (5) years to commence on  
January 1, 1998.

FOUR: Commencing on January 1, 1998, TENANT shall pay to LANDLORD an annual  
rental as follows:

<u>PERIOD</u>	<u>RENT PER SQ. FT</u>	<u>MONTHLY INSTALLMENTS</u>
01/01/1998 - 12/31/2002	\$4.00	\$2,914.05

The monthly installments for rent specified herein, shall be paid in advance on the first day of  
each month at LANDLORD'S office, or at any other place that LANDLORD may notify. In the event  
that the date of commencement does not fall on the first of the month, TENANT further agrees to pay  
the first partial monthly installments, prior to, or on the date of commencement.

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**FIVE:** The amount of \$2,185.53 deposited by TENANT under the provisions of a previous Lease Contract shall be credited to the \$4,196.23 deposit required herein; therefore, simultaneously herewith TENANT shall pay \$2,010.70 in a Certified Check to complete said amount. *OR 14571 4/2/92 \$2,010.70 @*

This deposit shall guarantee the compliance by TENANT of its obligations, under this Contract, particularly, but not limited to, the payment of rent, the compliance of the environmental clauses herein included and the return of the Premises in proper condition at the termination of this Lease. On said termination, if TENANT is not in default of any of the terms and conditions of this Contract, LANDLORD will return to TENANT the sum of money, if any, held pursuant to this provision, after LANDLORD's Environmental Office certifies that there are no environmental deficiencies as a result of TENANT's manufacturing operation on the demised Premises.

**SIX:** TENANT agrees to have on the date of commencement of the term of this Lease a capitalization of \$250,000.00.

Likewise TENANT agrees to install within six (6) months from the same date manufacturing machinery and equipment with a value of at least \$250,000.00.

This shall not include the cost of transportation and installation thereof, nor its ordinary depreciation after installation; and within eighteen (18) months from the date of commencement of the term, to employ a minimum of thirty (30) production workers. The aforementioned levels, shall be maintained throughout the term of this Lease or any extension thereof.

**SEVEN:** All notices, demands, approvals, consents and/or communications herein required or permitted shall be in writing. If by mail should be certified and to the following addresses, to LANDLORD: PO BOX 362350, SAN JUAN, PUERTO RICO 00936-2350. To TENANT: MR. HECTOR DOMINGUEZ, GENERAL MANAGER, CHECKPOINT SYSTEMS OF P. R., INC., P. O. BOX 7283, PONCE, PUERTO RICO 00732.

**EIGHT: Net Lease** - This Lease shall be interpreted as a net lease; it being the exclusive responsibility of TENANT to pay for all operating expenses, utilities, maintenance, expenses, insurance, taxes or any other costs, expenses or charges of any nature not specifically assumed by LANDLORD hereunder.

**NINE: Warranty as to use** - LANDLORD does hereby warrant that at the time of the commencement of the term of this Lease, the Premises may be used by TENANT for the manufacturing purposes herein intended which are deemed consistent with the design and construction in accordance with the corresponding plans and specifications.

**TEN: Alterations** - TENANT shall make no alterations, additions or improvements to the Premises without the prior consent of LANDLORD and all such alterations, additions or improvements made by or for-----

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TENANT, shall be at TENANT'S own cost and expenses and shall, when made, be the property of LANDLORD without additional consideration and shall remain upon and be surrendered with the Premises as a part thereof at the expiration or earlier termination of this Lease, subject to any right of LANDLORD to require removal or to remove as provided for hereinafter.

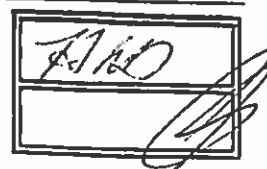
In the event TENANT asks for LANDLORD'S consent for any alteration; LANDLORD may at its option, require from TENANT to submit plans and specifications for said alteration. Before commencing any such work, said plans and specifications, if required, shall be filed with and approved by all governmental agencies having jurisdiction thereof, and the consent of any mortgagee having any interest in or lien upon this Lease shall be procured by TENANT and delivered to LANDLORD if required by the term of the mortgage.

Before commencing any such work, TENANT shall at TENANT'S own cost and expense, deliver to LANDLORD a General Accident Liability Policy more particularly described in Article THIRTY (30) hereoff, but said policy shall recite and refer to such work, and in addition thereto, if the estimated cost of such work is more than FIVE THOUSAND DOLLARS (\$5,000.00), TENANT shall, at TENANT'S own cost and expense, deliver to LANDLORD a surety bond, or a performance bond from a company acceptable to LANDLORD, or a similar bond or other security satisfactory to LANDLORD, in an amount equal to the estimated cost of such work, guaranteeing the completion of such work within a reasonable time, due regard being had to conditions, free and clear of materialmen liens, mechanics liens or any other kind of lien, encumbrances, chattel mortgages and conditional bills of sale and in accordance with said plans and specifications submitted to and approved by LANDLORD. At LANDLORD'S option TENANT shall provide a blanket written guarantee in an amount sufficient to satisfy LANDLORD as to all alterations, changes, additions and improvements to the Premises in lieu of separate guarantee for each such project.

TENANT shall pay the increased premium, if any, charged by the insurance companies carrying insurance policies on said building, to cover the additional risk during the course of such work.

ELEVEN: Power Substation - If required by TENANT'S operations, TENANT shall, at its own cost and expense, construct and/or install a power substation and connect it to the PUERTO RICO ELECTRICAL POWER AUTHORITY (PREPA) distribution lines, for voltages up to 13.2 KV; and to PREPA transmission lines for voltages of 38 KV, all in conformity to PREPA'S requirements. Such construction shall, in no event, be

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undertaken by TENANT until after LANDLORD has approved the location thereof, as well as the routing of the power line extension.

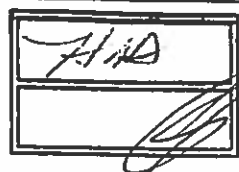
TWELVE: Repairs and Maintenance - TENANT shall, at its own cost and expense, put, keep and maintain in thorough repair and good order and safe condition the building and improvements standing upon the Premises at the commencement of the term hereon or thereafter erected upon the premises, or forming part of the Premises, and their full equipment and appurtenances, the side walks areas, sidewalk hoists, railings, gutters, curbs and the like in from of the adjacent to the Premises, and each and every part thereof, both inside and outside, extraordinary and ordinary, and shall repair the whole and each and every part thereof in order to keep the same at all times during the term hereof in through repair and good order and safe conditions, whenever the necessity or desirability therefor may occur, and whether or not the same shall occur, in whole or in part, by wear, tear, obsolescence or defects, and shall use all reasonable precautions to prevent waste, damage or injury, except as provided hereinafter.

LANDLORD and not TENANT, shall be responsible for and shall promptly correct any defects in the building on the Premises which are due to faulty design, or to errors of construction not apparent at the time the Premises were inspected by TENANT for purposes of occupancy by TENANT; this shall not be interpreted to relieve TENANT of any responsibility or liability herein otherwise provided, including among others, for structural failure due to the fault or negligence of TENANT.

TENANT shall also, at TENANT'S own cost and expense, maintain the landsite in thoroughly clean condition; free from solid waste (which includes liquid and gaseous as defined by the Resource Conservation and Recovery Act), and the Regulation on Hazardous and Non-Hazardous Waste of the Environmental Quality Board, as amended, rubbish, garbage and other obstructions. Specifically, TENANT shall not use said landsite, nor permit it to be used, as a deposit or as dump for raw materials, waste materials, hazardous, toxic or non-toxic substances, or substances of whichever nature. TENANT shall neither make any excavation for the purpose of storing, putting away and/or concealing raw materials or waste materials of any kind. Underground storage of hazardous and/or toxic substances is specifically prohibited.

TENANT shall not do or cause to be done, nor permit on the Premises anything deemed extra hazardous, nor shall it store in the Premises flamable or toxic products of any class or kind without taking the proper precautions and complying with applicable federal and Commonwealth laws and regulations.

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In case TENANT needs to store in the landsite raw materials of a hazardous and/or toxic nature or hazardous and/or toxic wastes, TENANT shall notify LANDLORD and secure its prior authorization. LANDLORD shall be furnished with a copy of any permit issued for such storage.

Although it is not intended that TENANT shall be responsible for any decrease in value of the Premises due to the mere passing of time, or for ordinary wear and tear of surfaces and other structural members of the building, nevertheless TENANT shall: (i) replace, with like kind and quality, doors, windows; electrical, sanitary and plumbing, fixtures; building equipment and/or other facilities or fixtures in the Premises which through TENANT's use, fault or negligence, become too worn out to repair during the life of this Lease, (ii) paint the property inside and outside as required.

In addition to the foregoing, TENANT shall indemnify and save harmless LANDLORD from and against any and all cost, expenses, claims, losses, damages, or penalties, including counsel fees, because of or due to TENANT'S failure to comply with the foregoing, and TENANT shall not call upon LANDLORD for any disbursement or outlay of money whatsoever, and hereby expressly releases and discharges LANDLORD of and from any liability or responsibility whatsoever in connection therewith.

THIRTEEN: Roof Care - TENANT, without the prior consent of LANDLORD, shall not: (i) erect or cause to be erected on the roof any bill board, aerial sign, or structure of any kind, (ii) place any fixture, equipment or any other load over the roof, (iii) drill any hole on the roof for whichever purpose, (iv) use the roof for storage, nor (v) correct any leaks whatsoever, this being LANDLORD'S sole responsibility. Furthermore, TENANT shall take all reasonable precautions to insure that the drainage facilities of the roof are not clogged and are in good and operable conditions at all times.

FOURTEEN: Floor Loads - TENANT hereby acknowledges that it has been informed by LANDLORD that the maximum floor load of the Premises herein demised is 150 pounds per sq. ft. Therefore, TENANT hereby agrees that in the event the load of the machinery and equipment to be installed thereat exceeds such maximum load, it shall, at its own cost and expense, carry out any improvements to the floor of the Premises which may be necessary to support such additional load; it being further agreed and understood that construction and/or installation of such improvements shall not be commenced until after LANDLORD'S approval of the plans to be prepared therefor by TENANT and thereafter,

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after completion of construction and/or installation of said facilities, they shall be deemed covered by and subject to the applicable provisions of this Contract; it being further specifically agreed and understood that upon termination of this Lease, such facilities shall be removed by TENANT, at its own cost and expense, or in the alternative, and upon request by LANDLORD, they shall remain as part of the Premises with no right whatsoever on the part of TENANT to be reimbursed and/or compensated therefor.

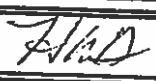

FIFTEEN: Fixtures - TENANT shall not affix to the ceiling, nor to its supporting joists or columns, nor to any of its walls, any air conditioning unit, nor any other fixture, without the prior consent of LANDLORD.

SIXTEEN: Environmental Protection and Compliance - TENANT agrees, as a condition hereof, that it will not discharge its solid, liquid or gaseous industrial and/or sanitary effluent or discharges, either into the sewer system and/or into any other place until after required authorizations therefor has been obtained from the Puerto Rico Aqueduct and Sewer Authority, and/or the Department of Health of Puerto Rico and/or Environmental Quality Board, and/or any other governmental agency having jurisdiction thereof and TENANT further agrees and undertakes to pre-treat any such effluent, prior to discharge thereof as required by the said Authority, Department and/or governmental agency with jurisdiction, and/or to install any equipment or system required, and to fully abide by and comply with any and all requisites imposed thereby, and upon request by LANDLORD to submit evidence of such compliance; it being agreed that non-compliance thereof by TENANT for a period of ninety (90) days after notice, shall be deemed an additional event of default under the provisions hereof. Provided, that no construction and/or installation shall be made until LANDLORD has approved of it.

TENANT shall also, at TENANT'S own cost and expense, construct and maintain Premises, processes and/or operating procedures in compliance with the terms, conditions and commitments specified in any Environmental Impact Statement, Environmental Assessment or any other analogous document produced by the Commonwealth of Puerto Rico, Economic Development Administration /LANDLORD as lead agency/ or by any other governmental agency in connection with the approval or operation of the project.

TENANT shall also serve LANDLORD with a copy of any lawsuit, notice of violation, order to show cause or any other regulatory or legal action against TENANT in any environmental-related case or issue.

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TENANT shall also serve LANDLORD with a copy of any permit granted to TENANT for air emissions, water discharge, solid waste generation, storage, treatment and/or disposal, and for any hazardous and/or toxic waste raw materials or by-products used or generated, stored, treated and/or disposed or any other endorsement, authorization or permit required to be obtained by TENANT.

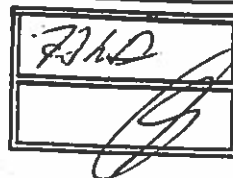
TENANT shall also serve LANDLORD with a copy of any filing or notification to be filed by TENANT with any regulatory agency or any environmentally related case or issue, especially in any situation involving underground or surface water pollution, hazardous and/or toxic waste spillage and ground contamination. The notification to LANDLORD shall take place not later than the actual filing of the pertinent documents with the regulatory agency.

SEVENTEEN: Improper Use - TENANT, during the term of this Lease and of any renewal or extension thereof, agrees not to use or keep or allow the leased Premises or any portion thereof to be used or occupied for any unlawful purpose or in violation of this Lease or of any certificate of occupancy or certificate of compliance covering or affecting the use of the Premises or any portion thereof, and will not suffer any act to be done or any condition to exist on the Premises or any portion thereof, or any article to be brought thereon, which may be dangerous, unless safeguarded as required by law, or which may in law, constitute a nuisance, public or private, or which may made void or voidable any insurance then in force on the leased Premises.

EIGHTEEN: Government Regulations - TENANT agrees and undertakes to abide by and comply with any and all rules, regulations and requirements of the Planning Board of Puerto Rico, the Department of Health, the Environmental Quality Board, the Environmental Protection Agency (EPA), where applicable and/or of any other governmental agency, having jurisdiction thereon applicable to TENANT'S operations at the Premises and/or products to be manufactured thereat, and if requested by LANDLORD, TENANT shall submit evidence of such compliance; it being agreed and understood that noncompliance with any and all such rules, regulations and requisites shall be deemed an additional event of default under the provisions of this Contract, unless remedied within thirty (30) days after receipt of notice thereof.

Any and all improvements to the Premises required by any governmental agency, having jurisdiction thereon so as to carry TENANT'S operations in accordance with the regulations and requisites thereof, shall be at TENANT'S own cost and expense, except for any

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improvements that may be required as a result of any violation by LANDLORD that may exist at the effective date hereof other than violations caused by TENANT or TENANT'S agents.

TENANT further agrees and undertakes to install in the Premises, at its own costs and expense, such devices as may be necessary to prevent any hazard, which may be caused or created by its operations from affecting the environmental integrity of the landsite or causing any nuisance to adjacent TENANTS and/or the community in general; it being agreed and understood that creating or causing any such nuisance, shall be deemed an additional event of default under the provisions of this Contract.

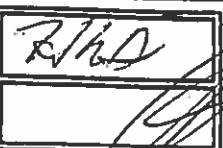

TENANT further agrees and undertakes to abide by and comply with any and all rules, regulations and requisites of the Fire Department relative to the use and storage of raw materials, finished products and/or inflammable materials, and/or of any other governmental agency, having jurisdiction thereon applicable to TENANT'S operations at the Premises, and if requested by LANDLORD, TENANT shall submit evidence of such compliance; it being agreed and understood that noncompliance by TENANT with any of the aforementioned rules, regulations and requisites shall be deemed, in each of such cases, an additional event of default under the provisions of this Contract, unless remedied within thirty (30) days after receipt of notice thereof.

If as a consequence of the foregoing dispositions, TENANT need to make alterations to the Premises, the same shall be done subject to the dispositions of Article TEN hereof.

NINETEEN: Use Permit - TENANT agrees to abide by and comply with any and all conditions and requisites included in the Use Permit which may be issued by the Puerto Rico Permits and Regulations Administration (ARPE), and if requested by LANDLORD, shall submit evidence of such compliance; it being agreed and understood that noncompliance by TENANT with any and all such conditions and requisites and/or the cancellation of the said Use Permit shall, in each of such cases, be deemed an additional event of default under the provisions of this Contract.

TWENTY: Inspection - TENANT shall permit LANDLORD or LANDLORD'S agents to enter the Premises at all reasonable time for the purpose of inspecting the same, or of making repairs that TENANT has neglected or refused to make as required by the terms, covenants and conditions of this Lease, and also for the purpose of showing the Premises to persons wishing to purchase the same, and during the year next preceding the expiration of this Lease, shall permit inspection thereof by or on

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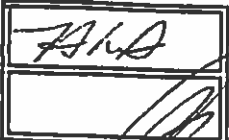
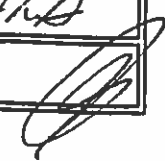
behalf of prospective TENANTS. If, at a reasonable time, admission to the Premises for the purposes aforesaid cannot be obtained, or if at any time an entry shall be deemed necessary for the inspection or protection of the property, or for making any repairs, whether for the benefit of TENANT or LANDLORD, LANDLORD'S agents or representatives may enter the Premises by force, or otherwise, without rendering LANDLORD, or LANDLORD'S agents or representative liable to any claim or cause of action or damage by reason thereof, and accomplish such purpose.

The provisions contained in this Article are not to be construed as an increase of LANDLORD'S obligations under this Lease; it being expressly agreed that the right and authority hereby reserved does not impose, nor does LANDLORD assume, by reason thereof, any responsibility or liability whatsoever for the repair, care of supervision of the Premises, or any building, equipment or appurtenance on the Premises.

TWENTY ONE: LANDLORD'S entry for repairs and alterations - LANDLORD reserves the right to make such repairs, changes alterations, additions or improvements in or to any portion of the building and the fixtures and equipment which are reputed part thereof as it may deem necessary or desirable and for the purpose of making the same, to use the street entrances, halls, stairs and elevators of the building provided that there be no unnecessary obstruction of TENANT'S right of entry to and peaceful enjoyment of the Premises, and TENANT shall make no claim for rent abatement compensation or damages against LANDLORD by reason of any inconvenience or annoyance arising therefrom.

TWENTY TWO: LANDLORD excused in certain instances - If, by reason of inability to obtain and utilized labor, materials or supplies, or by reason of circumstances directly or indirectly the result of any state of war, or of emergency duly proclaimed by the corresponding governmental authority, or by reason of any laws, rules orders, regulations or requirements of any governmental now or hereafter in force or by reason of strikes or riots, or by reason of accidents, in damage to or the making of repairs, replacements or improvements to the building or any of the equipment thereof, or by reason of any other cause reasonable beyond the control of LANDLORD, LANDLORD shall be unable to perform or shall be delayed in the performance of any covenant to supply any service, such non-performance or delay in performance shall not be ground to any claim against LANDLORD for damages or constitute a total or partial eviction, constructive or otherwise. It being agreed and understood that the time for completion of any such construction, shall be extended for a period of time equal to the number of days of any such delay.

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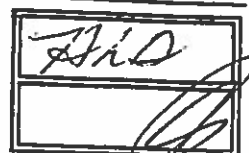


TWENTY THREE: Quiet Enjoyment - TENANT on paying the full rent and keeping and performing the conditions and covenants herein contained, shall and may peaceably and quietly enjoy the Premises for the term aforesaid, subject, however, to the terms of this Lease and to the mortgages hereinafter mentioned.

TWENTY FOUR: Leasehold Improvements - If leasehold improvements made by or for the benefit of TENANT in the Premises at his request or other personal property to TENANT are assessable or taxable and a tax liability is imposed to TENANT or LANDLORD, it is understood that it shall be the sole responsibility of TENANT to pay such taxes and in no event shall such taxes be the liability of or be transferable to LANDLORD. In the event that by operation of law, such taxes become a liability of LANDLORD, TENANT shall pay such taxes as they become due and payable and shall promptly reimburse LANDLORD for any payments or expenses incurred or disbursed by LANDLORD by reasons of any such assessment. Said amount shall be due and payable, as additional rent, with the next installment of rent. In the event that TENANT fails to make this payment when due, it shall be subject to the dispositions of Article THIRTY SEVEN hereof.

TWENTY FIVE: Stoppage of Operations - It is understood by the parties hereto that this Lease is made by LANDLORD in furtherance of the industrialization plans of the Commonwealth of Puerto Rico, and it is accordingly understood that TENANT will use all reasonable efforts while this Lease is in effect to maintain a manufacturing operation upon the Premises, but nothing contained in this paragraph shall be deemed to require TENANT to maintain such an operation otherwise than in accordance with sound principles of business management, or (without limiting the generality of the foregoing) to prevent TENANT from curtailing such operation or from shutting it down, whenever and as often as TENANT may, in the exercise of sound business judgment, deem such action advisable. However, TENANT shall give to LANDLORD notice of any necessary or convenient curtailment and/or shut-down, at least seven (7) days prior to the date fixed therefor except in cases of an emergency shut-down, in which case such notice shall be given at the earliest possible time. No curtailment of operations or shut-down in accordance with the provisions of this paragraph shall constitute a default under the provisions of this Contract which will enable LANDLORD to terminate it, unless such plants shall have been shut-down for a period of six (6) consecutive months. A shut-down on account of unforeseeable event or events which although foreseeable could not be

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prevented, shall not constitute a breach of this agreement. Nothing in this paragraph contained shall relieve TENANT from the payment of rent during the period of any shut-down or curtailments of operations.

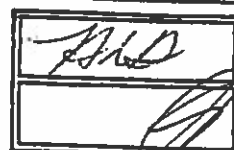
TWENTY SIX: Assignment and Subletting - TENANT shall not assign, this Lease nor let or sublet the Premised or any part thereof except to its parent company, to a wholly owned subsidiary, to an affiliate of TENANT, wholly owned by TENANT'S parent company or to a corporation to be organized by TENANT. In any of these cases, TENANT shall promptly notify LANDLORD of said assignment or subletting, it being agreed and understood that no such assignment or subletting shall: (i) reduce or, in any way, affect the obligations of TENANT under this Lease, nor (ii) release TENANT from liability under this Lease.

TWENTY SEVEN: Successors in Interest - This Lease Contract and every provision thereof, shall bind and inure to the benefit of the legal representatives, successors and assigns on the parties. However, the term "LANDLORD", as used in this Contract, so far as any covenants or obligations on the part of LANDLORD under this Lease are concerned, shall be limited to mean and include only the owner or lessor, at the time in question, of the Premises, so that in the event hereafter of a transfer of the title to the Premises, whether any such transfer be voluntary or by operation of law or otherwise, the person, natural or juridical, by whom any such transfer is made, shall be and hereby is entirely freed and relieved of all personal liability as respects the performance of the covenants and obligations of LANDLORD under this Lease from and after the date of such transfer.

TWENTY EIGHT: No Representation by LANDLORD - LANDLORD, LANDLORD'S agents or employees, or the agents, executives or employees of the Economic Development Administration, have made no representations or promises with respect to the Premises except as herein expressly set forth and no rights, easements or licenses are acquired by TENANT by implication or otherwise except as expressly set forth in the provisions of this Contract. The taking possession of the Premises by TENANT, shall be conclusive evidence, as against TENANT, that TENANT accepts same "AS IS" and that said Premises, particularly the building which forms a part of the same, were in good and satisfactory conditions at the time such possession was so taken.

TWENTY NINE: Damages - LANDLORD shall not be responsible for any latent defect or change of conditions in the Premises resulting in damage to the same, or the property or person therein, except to the

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extent of LANDLORD'S gross negligence, and provided such claims or loss is not covered by insurances herein required from TENANT. TENANT shall promptly notify LANDLORD of any damage to or defects in the Premises, particularly in any part of the building's sanitary, electrical, air conditioning or other systems located in or passing through the Premises, and the damage or defective conditions, subject to the provisions of Article TWENTY ONE (21) hereof, shall be remedied by LANDLORD with reasonable diligence.

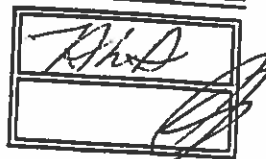
**THIRTY: General Liability Insurance** - TENANT shall indemnify, have harmless and defend LANDLORD and agents, servants and employees of LANDLORD against and from any and all liability, fines, suits, claims, demands, expenses, including attorneys' fees, and actions of any kind or nature arising by reason of injury to person or property including the loss of use resulting thereof or, violation of law occurring in the Premises occasioned in whole or in part by any negligent act or omission on the part of TENANT or an employee (whether or not acting within the scope of his employment), servant, agent, licensee, visitor, assignor or undertenant of TENANT, or by any neglectful use or occupancy of the Premises or any breach, violation or non-performance of any covenant in this Lease on the part of TENANT to be observed or performed.

Pursuant to the foregoing, TENANT shall, maintain during the term of this lease, at its own cost and expense, a Comprehensive General Liability Policy. Said policy shall: (i) be for a combined single limit of no less than \$500,000.00 per accident, (ii) hold LANDLORD harmless against any and all liability as hereinbefore stated, and (iii) the care, custody & control exclusion shall be deleted from this coverage. LANDLORD may require additional reasonable limits of public liability insurance and coverages, when changing circumstances so require.

**THIRTY ONE: Property Insurance** - TENANT recognizes that the rent provided for herein does not include any element to indemnify, repair, replace or make whole TENANT, his employees, servants, agents, licensees, visitors, assignees, or undertenant for any loss or damage to any property or injury to any person in the Premises.

Accordingly, during the term of this Lease, TENANT shall keep the building standing upon the Premises at the commencement of the term hereof or thereafter erected upon the Premises, including all equipment appurtenant to the Premises and all alterations, changes, additions and improvements, insured for the benefit of LANDLORD and TENANT, as their

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respective interest may appear, in an amount at least equal to the percentages stated below (as LANDLORD may from time to time determine). The basis of the Property Insurance shall be Replacement Cost and the coverage an "All Risks" Property Insurance Policy. Coverages included in the All Risks Form:

1. Fire - "Building & Contents Form"
  - (a) Building - 100% of insurable value exclusive of foundations
  - (b) Contents - All equipment appurtenant to the Premises (State value of Policy)
2. Additional Coverages under the Fire Policy
  - (a) Extended Coverage Endorsement - 100% of insurable value exclusive of foundations
  - (b) Earthquake - 100% of insurable value including foundations
  - (c) Vandalism and Malicious Mischief Endorsement
  - (d) Improvements and Betterments - For all alterations, changes, additions and improvements
3. Landsite and Flood whenever applicable and/or necessary
4. Boiler and Machinery (if any) - 100% of insurable value
5. Pollution Liability Policy - if necessary.

THIRTY TWO: Multifactory Building Specific Dispositions - In the event that the Premises constitute a section or sections of an industrial building and landsite in which other operations are conducted by other TENANTS: (i) the insurance coverage herein required, shall be acquired by LANDLORD for the whole of the industrial building and TENANT shall reimburse LANDLORD, for its proportionate share in the total cost of said policies, (ii) if, because of anything done, caused or permitted to be done, permitted or omitted by TENANT, the premium rate for any kind of insurance affecting the Premises shall be increased, TENANT shall pay to LANDLORD the additional amount which LANDLORD may be thereby obligated to pay for such insurance, and if LANDLORD shall demand that TENANT remedy the condition which cause the increase in the insurance premiums rate, TENANT will remedy such conditions within five (5) days after such demand, and (iii) the insurance policies required in the preceding Articles THIRTY (30) & THIRTY ONE (31) shall be endorsed to include a waiver of subrogation against TENANT. All amounts to be reimbursed by TENANT under this Article, shall be due and payable, as additional rent, with the next

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installment of rent. In the event that TENANT fails to make this payment, when due, it shall be subject to the dispositions of Article THIRTY SEVEN (37) hereof.

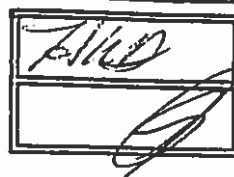
THIRTY THREE: Additional Dispositions about Insurance - All the Insurance policies herein required from TENANT, shall be taken in form and substance acceptable to LANDLORD with insurance companies duly authorized to do business in Puerto Rico, having a "A" and a higher financial rating according to Best's Insurance Report; and shall include LANDLORD as additional insured. TENANT shall instruct the corresponding insurer to deliver such policies or certified copies of Certificates of Insurance, in lieu of, directly to LANDLORD. LANDLORD reserves the right not to deliver possession of the Premises to TENANT, unless, and until two (2) days after such original policies, or certified copies or certificates have been deposited with LANDLORD.

Furthermore, said policies, shall: (i) provide that they may not be cancelled by the insurer for nonpayment of premium or, otherwise, until at least thirty (30) days after service of notice by registered or certified mail of the proposed cancellation upon LANDLORD, and (ii) be promptly renewed by TENANT upon expiration and TENANT shall, within thirty (30) days after such renewal, deliver to LANDLORD adequate evidence of the payment of premiums thereon. If such premiums or any of them shall not be so paid, LANDLORD may procure the same in the manner set forth for governmental agencies, and TENANT shall reimburse LANDLORD any amount so paid. This reimbursement being due and payable with the next installment of rent. In the event that TENANT fails to make this payment when due, it shall be subject to the dispositions of Article THIRTY SEVEN (37) hereof. It is expressly agreed and understood, that payment by LANDLORD of any such premiums shall not be deemed to waive or release the default in the payment thereof by TENANT nor the right of LANDLORD to take such action as may be available hereunder as in the case of default in the payment of rent.

Upon the commencement of the term hereof, TENANT shall pay to LANDLORD the apportioned unearned premiums on all such policies of insurance then carried by LANDLORD in respect of the Premises in the event TENANT continues with the insurance policies placed in LANDLORD.

TENANT shall not violate nor permit to be violated any of the conditions or provisions of any of said policies, and TENANT shall so perform and satisfy the requirements of the companies writing such policies that at all times companies of good standing and acceptable to LANDLORD shall be willing to write and continue such insurance.

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TENANT shall cooperate with LANDLORD in connection with the collection of any insurance monies that may be due in the event of loss and shall execute and deliver to LANDLORD such proofs of loss and other instruments that may be required for the purpose of facilitating the recovery of any such insurance monies, and in the event that TENANT shall fail or neglect so to cooperate or to execute, acknowledge and deliver any such instrument, LANDLORD, in addition to any other remedies, may as the agent or attorney-in fact of TENANT, execute and deliver any proof of loss or any other instruments as may seem desirable to LANDLORD and any mortgagee for the collection of such insurance monies. This shall not be interpreted as any waiver of the obligations of TENANT under Articles THIRTY, THIRTY ONE, THIRTY TWO and THIRTY THREE hereof or exclusively in favor of LANDLORD under Article THIRTY NINE hereof.

THIRTY FOUR: Waivers - The receipt by LANDLORD of the rent, additional rent, or any other sum or charges payable by TENANT with or without knowledge of the breach of any covenant of this Contract, shall not be deemed a waiver of such breach. No act or omission of LANDLORD or its agent during the term of this Lease shall be deemed an acceptance of a surrender of the Premises and no agreement to accept a surrender of the Premises shall be valid unless it be made in writing and subscribed by LANDLORD. This Contract contains all the agreements and conditions made between the parties hereto with respect to the Premises and it cannot be changed orally. Any additions to, or charges in this Lease must be in writing, signed by the party to be charged.

Failure on the part of LANDLORD to act or complain of any action or nonaction on the part of TENANT shall not be deemed to be a waiver of any of its respective rights hereunder nor constitute a waiver at any subsequent time of the same provision. The consent or approval by LANDLORD to, or of any action by the other requiring consent or approval, shall not be deemed to waive or render unnecessary the consent or approval by LANDLORD of any subsequent similar act.

THIRTY FIVE: Reinstatement - No receipt of monies by LANDLORD for TENANT after the termination or cancellation hereof in any lawful manner shall reinstate, continue or extend the term hereof, or affect any notice theretofore given to TENANT, or operate as a waiver of the right of LANDLORD to enforce the payment of rent, additional rent, or other charges then due or thereafter falling due, or operate as a waiver of the right of LANDLORD to recover possession of the Premises by proper suit, action, proceeding or remedy; it being agreed that,

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after the service of notice to terminate or cancel this Lease, and the expiration of the time therein specified, if the default has not been cured in the meantime, or after the commencement of suit, action or summary proceedings or of any other remedy, or after a final order, warrant of judgment of the possession of the Premises, LANDLORD may demand, receive and collect any monies then due, or thereafter becoming due, without in any manner affecting such notice, proceeding, suit, action, order, warrant or judgment; and any and all such monies so collected shall be deemed to be payments for the use and occupation of the Premises, or at the election of LANDLORD, on account of TENANT'S liability hereunder. Delivery or acceptance of the keys to the Premises, or any similar act, by the LANDLORD, or its agents or employees, during the term hereof, shall not be deemed to be a delivery or an acceptance of a surrender of the Premises unless LANDLORD shall explicitly consent to it, in the manner set forth hereinbefore.

THIRTY SIX: Subordination and Attornment - This Lease is and shall be subject and subordinate to all liens, or mortgages which may now or hereafter affect the Premises and to all renewals, modifications, consolidations, replacements and extensions thereof and, although this subordination provision shall be deemed for all purposes to be automatic and effective without any further instrument on the part of TENANT, TENANT shall execute any further instrument requested by LANDLORD to confirm such subordination.

TENANT further covenants and agrees that if by reason of a default upon the part of LANDLORD of any mortgage affecting the Premises, the mortgage is terminated or foreclosed by summary proceedings or otherwise, TENANT will attorn to the mortgagee or the purchaser in foreclosure proceedings, as the case may be, and will recognize such mortgage or purchaser, as the TENANT'S landlord under this Lease. TENANT agrees to execute and deliver, at any time and from time to time, upon the request of LANDLORD or of the mortgagee or the purchaser in foreclosure proceedings, as the case may be, any reasonable instrument which may be necessary or appropriate to evidence such attornment. TENANT further waives the provision of any statute or rule of law now or hereafter in effect which may give or purport to give TENANT any right of election to terminate this lease or to surrender possession of the Premises demised hereby in the event any such proceeding is brought by the holder of any such mortgage, and TENANT'S obligations hereunder shall not be affected in any way whatsoever by any such proceeding.

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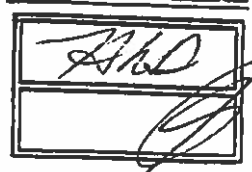


TENANT, covenants and agrees, upon demand of the holder of any mortgage duly recorded or recordable in the corresponding Registry of the Property or of any receiver duly appointed by the foreclose any such mortgage, to pay to the holder of any such mortgage or to such receiver, as the case may be, all rent becoming due under this Lease after such demand, provided such holder of any such mortgage or any such receiver complies with the obligations of LANDLORD under this Lease.

TENANT, upon request of LANDLORD or any holder of any mortgage or lien affecting the Premises, shall from time to time, deliver or cause to be delivered to LANDLORD or such lien holder or mortgagee, within ten (10) working days from date of demand a certificate duly executed and acknowledged in form for recording, without charges, certifying, if true, or to extent true, that this Lease is valid and subsisting and in full force and effect and LANDLORD is not in default under any of the terms of this Lease.

THIRTY SEVEN: Late Payments and Payment by LANDLORD - In the event that (i) TENANT makes late payment, or fails to make payments to LANDLORD, in whole or in part, of the rent, or of the additional rent, or of any of the other payments of money required to be paid by TENANT to LANDLORD, as stipulated in this Lease, when and as due and payable; or if (ii) LANDLORD, without assuming any obligation to do so, after any notice or grace period provided hereunder, performs or causes to be performed, at the cost and expense of TENANT, any of the acts or obligations agreed to be performed by TENANT, as stipulated in this Lease, and TENANT fails to refund LANDLORD any amounts of money paid or incurred by LANDLORD in performing of causing the performance of such acts or obligations, when and as due and payable, TENANT undertakes and agrees to pay LANDLORD as additional rent, interest on such lately paid or unpaid rents, additional rent, and/or on such other payments of money required to be paid, and/or on any such amounts of money required to be refunded, from and after the date when payment thereof matured or became due and payable, until full payment, at the rate of twelve (12%) per cent per annum, or if such 12% interest, is unlawful, then and in such event, at the highest maximum prevailing rate of interest on commercial unsecured loans as fixed by the Board of Regulatory Rates of Interest and Financial Charges, created under Law #1, approved October 15, 1973 (10 LPRA 998), as amended, or by any successor statute or regulation thereof.

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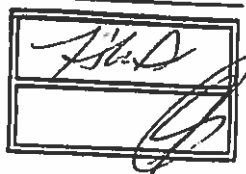




THIRTY EIGHT: Abatement - If any substantial service or facility to be provided by LANDLORD is unavailable for a period exceeding thirty (30) days and LANDLORD has been notified of the same, should time unavailability of such service render all or any portion of the Premises untenable, TENANT after the aforesaid thirty (30) days, shall be entitled to an abatement of a portion of the rent that shall reflect that portion of the Premises which is untenable, provided the damage to the service or facility is not attributable to the act or neglect of TENANT or the employees, servants, licensees, visitors, assigns or undertenants of TENANT.

THIRTY NINE: Fire or other Casualty - If before or during the term of this Lease, the Premises shall be damaged by fire or other casualty, LANDLORD after written notice thereof is given by TENANT, shall repair the same with reasonable dispatch after notice to it of the damage, due allowances being made for any delay due to causes beyond the LANDLORD'S reasonable control, provided, however, that LANDLORD shall not be required to repair or replace any furniture, furnishings or other personal property which TENANT may have placed or installed or which it may be entitled or required to remove from the Premises. LANDLORD shall proceed with due diligence to obtain the corresponding insurance adjustment of the loss and TENANT shall fully cooperate with LANDLORD and assist in the adjustment of the loss. Until such repairs are completed, and provided such damage or other casualty is not attributable to the act or neglect of TENANT or the employees, servants, licensees, visitors, assigns or undertenants of TENANT, the rent required to be paid pursuant to Article FOUR hereof, shall be abated in proportion to the part of the Premises which are untenable. If the building, be so damaged that LANDLORD shall decide to demolish and/or to reconstruct the building, in whole or in part, LANDLORD may terminate this Lease by notifying TENANT within a reasonable time after such damage of LANDLORD'S election to terminate this Lease, such termination to be effective immediately if the term shall not have commenced or on a date to be specified in such notice if given during the term. In the event of the giving of such notice during the term of this Lease, the rent shall be apportioned and paid up to the time of such fire or other casualty if the Premises are damaged, or up to the specified date of termination if the Premises are not damaged and LANDLORD shall not be otherwise liable to TENANT for the value of the unexpired term of this Lease.

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**FORTY: Default Provisions** - If, during the term of this Lease, TENANT shall: (i) apply for or consent in writing to, the appointment of a receiver, trustee or liquidator of TENANT or of all or substantially all of its assets or (ii) seek relief under the Bankruptcy Act, or admit in writing its inability to pay its debts as they become due, or (iii) make a general assignment for the benefit of this creditors, or (iv) file a petition case or an answer seeking relief (other than a reorganization not involving the liabilities of TENANT) or arrangement with creditors, or take advantage of any insolvency law, or (v) file an answer admitting the material allegations of a case filed against it in any bankruptcy, reorganization or insolvency proceeding or, if an order, judgment or decree shall be entered by any court of competent jurisdiction on the application of TENANT or creditor adjudicating TENANT a bankrupt or insolvent, or approving a petition seeking reorganization of TENANT (other than a reorganization not involving the liabilities of TENANT) or appointment of a receiver, trustee or liquidator of TENANT, or of all or substantially all its assets, and such order, judgment or decree, shall continue stayed and in effect for any period of sixty (60) consecutive days, the term of this Lease and all right, title and interest of TENANT hereunder shall expire as fully and completely as if that day were the date herein specifically fixed for the expiration of the term, and TENANT will then, quit and surrender the Premises to LANDLORD, but TENANT shall remain liable as hereinafter provided.

If, during the term of this Lease: (i) TENANT shall default in fulfilling any of the covenants of this Lease (other than the covenants for the payment of rent or additional rent), or of any other standing contract with LANDLORD or (ii) if, during the term of this Lease TENANT shall abandon, vacate, or remove from the Premises the major portion of the goods, wares, equipment, or furnishings usually kept on said premises, or (iii) this Lease, without the prior consent of LANDLORD, shall be encumbered, assigned or transferred in any manner in whole or in part or shall, by operation of law, pass to or devolve upon any third party, except as herein provided, or (iv) if TENANT is in violation of laws, rules and regulations regarding minimum wages of its employees, or of any other law, rules and regulations applicable to his operations, but which have not been specifically mentioned in this Lease, LANDLORD may give to TENANT notice of any such default or the happening of any event referred to above and if at the expiration of thirty (30) days after the service of such a notice the default or event upon which said notice was based shall continue to exist, or in the case of a default which cannot with due diligence be

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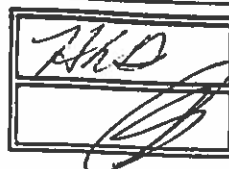


cured within a period of thirty (30) days, if TENANT fails to proceed promptly after the service of such notice and with all due diligence to cure the same and thereafter to prosecute the curing of such default with all due diligence (it being intended that in connection with a default not susceptible of being cured with due diligence within thirty (30) days that the time of TENANT within which to cure the same shall be extended for such period as may be necessary to complete the same with all due diligence), LANDLORD may give to TENANT a notice of expiration of the term of this Lease as of the date of the service of such second notice, and upon the giving of said notice of expiration the term of this Lease and all right, title and interest of TENANT hereunder shall expire as full and completely as if that day were the date herein specifically fixed for the expiration of the term, and TENANT or any party holding under his will then quit and surrender the Premises to LANDLORD, but TENANT shall remain liable as hereinafter provided.

If, (i) TENANT shall default in the payment of the rent, the additional rent, or of any other payment as required under this Lease and such default shall continue for ten (10) working days after notice thereof by LANDLORD, or (ii) if the default of the payment of the rent, continues for thirty (30) days from the date any such payment became due and payable (AUTOMATIC DEFAULT TERMINATION), or (iii) if this Lease shall terminate as in Paragraph one and two of this Article provided, this Lease shall terminate and TENANT will then quit and surrender the Premises to LANDLORD, but TENANT shall remain liable as hereinafter provided, LANDLORD or LANDLORD's agents and servants may immediately or at any time thereafter re-enter the Premises and remove all persons and all or any property therefrom, whether by summary dispossession proceedings or by any suitable action or proceeding at law, or with the license and permission of TENANT, which shall under this Contract be deemed given upon expiration of the strict thirty (30) days notice period of subdivision of paragraph Two of this Article, without LANDLORD being liable to indictment, prosecution or damages therefor and repossess and enjoy the Premises with all additions, alterations and improvements.

If TENANT shall fail to take possession of the Premises within ten (10) days after the commencement of the term of this Lease, or if TENANT shall vacate and abandon the Premises, LANDLORD shall have the right, at LANDLORD'S option, to terminate this Lease and the term hereof, as well as all the right, title and interest of TENANT hereunder, by giving TENANT five (5) days notice in writing of such

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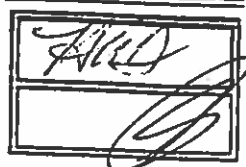




intention, and upon the expiration of the time fixed in such latter notice, if such default be not cured prior thereto, this lease and the term hereof, as well as all the right, title and interest of TENANT hereunder, shall wholly cease and expire in the same manner and with the same force and effect (except as to TENANT'S liability) as if the date fixed by such latter notice were the expiration of the term herein originally granted; and TENANT shall immediately quit and surrender to LANDLORD the Premises and each and every part thereof and LANDLORD may enter into or repossess the Premises, either by force, summary proceedings or otherwise. The right granted to LANDLORD in this Article or any other Article of this Lease to terminate this Lease, shall apply to any extension or renewal of the term hereby granted, and the exercise of any such right by LANDLORD during the term hereby granted, shall terminate any extension or renewal of the term hereby granted and any right on the part of TENANT thereto.

Upon the termination of this Lease by reason of any of the foregoing event, or in the event of the termination of this Lease by summary dispossess proceedings or under any provisions of law, now or at any time hereafter, in force by reason of, or based upon, or arising out of a default under or breach of this Lease on the part of TENANT, or upon LANDLORD recovering possession of the Premises in the manner or in any of the circumstances hereinbefore mentioned, or in any other manner or circumstances whatsoever, whether with or without legal proceedings, by reason of, or based upon, or arising out of a default under or breach of this Lease on the part of TENANT, LANDLORD, at its option, but without assuming any obligation to do so in any case, may at any time, and from time to time, relet the Premises or any part or parts thereof for the account of TENANT or otherwise on such terms as LANDLORD may elect, including the granting of concessions, and receive and collect the rents therefor, applying the same at a rental not higher than the one stipulated in this Contract, first to the payment of such reasonable expenses as LANDLORD may have incurred in recovering possession of the Premises, including reasonable legal expenses, and for putting the same into good order or condition or preparing or altering the same for re-rental, and expenses, commissions and charges paid, assumed, or incurred by LANDLORD in and about the reletting of the Premises or any portion thereof and then to the fulfillment of the covenants of TENANT hereunder. Any such reletting herein provided for, may be for the remainder of the term of this Lease or for a longer or shorter period or at a higher or lower rental. In any such case, whether or not, the Premises or any part thereof be relet, TENANT shall

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pay to LANDLORD the rent required to be paid by TENANT up to the time of such termination of this Lease, and/or the full rent provided for in the agreement for any holdover of such period after termination and up to the surrender or recovery of possession of the Premises by LANDLORD, as the case may be, and thereafter TENANT covenants and agrees, to pay to LANDLORD until the end of the term of this Lease as originally demised the equivalent of any deficiency amount of all the rent reserved herein, less the net avails of reletting, if any, as specified hereinabove in this Article and the same shall be due and payable by TENANT to LANDLORD as provided herein, that is to say, TENANT shall pay to LANDLORD the amount of any deficiency then existing.

FORTY ONE: LANDLORD'S Remedies - In the event TENANT shall default in the performance of any of the terms, covenants or provisions herein contained, LANDLORD may, but without the obligation to do so, perform the same for the account of TENANT and any amount paid or expense incurred by LANDLORD in the performance of the same shall be repaid by TENANT on demand. In the event of a breach or threatened breach by TENANT or any subtenant or other person holding or claiming under TENANT of any of the covenants, conditions or provisions hereof, LANDLORD shall have the right of injunction to restrain the same, and the right to invoke any remedy allowed by law or in equity as if specific remedies, indemnity or reimbursement were not herein provided for. The rights and remedies given to LANDLORD in this Lease are distinct, separate and cumulative, and no one of them, whether or not exercised by LANDLORD, shall be deemed to be a waiver, or an exclusion of any of the others.

FORTY TWO: Notice of Default - Anything in this Lease to the contrary notwithstanding, it is specifically agreed that there shall be no enforceable default against LANDLORD under any provisions of this Lease, unless notice of such default be given by TENANT to LANDLORD in which TENANT shall specify the default or omission complained of, and LANDLORD shall have thirty (30) days after receipt of such notice in which to remedy such default, or if said default or omission shall be of such a nature that the same cannot be cured within said period, then the same shall not be an enforceable default if LANDLORD shall have commenced taking the necessary steps to cure or remedy said default within the said thirty (30) days and diligently proceeds with the correction thereof.

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*[Handwritten signature]*



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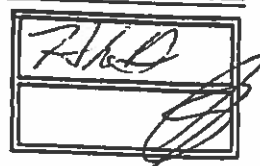
FORTY THREE: Capitalization - For the purpose of this Contract, specifically of Article SIX, Capitalization includes the total of owner's equity sources (preferred stock, common stock and surplus accounts) plus long-term debts, it being agreed and understood that the amortization of any such debt shall in no way diminish the amount originally determined as capitalization.

FORTY FOUR: Disclosure of Information - TENANT agrees to furnish to LANDLORD within ninety (90) days after the expiration of each fiscal year of TENANT, an annual statement certified by an independent Certified Public Accountant showing as of the end of each such fiscal year: (i) TENANT'S paid-in capital, (ii) long-term debts and capitalization as required by Articles SIX and FORTY THREE hereof, (iii) investment in machinery and its capacity to provide employment, (iv) taxes (including Social Security taxes) paid, and (v) any other information as required by this Lease.

In the event such statement is not filed with LANDLORD as herein provided, LANDLORD may obtain such information from TENANT at TENANT'S expense, and for such purpose TENANT shall make available to LANDLORD'S designated representatives, its books of accounts and other necessary data and facilities, all of which shall be provided and made available at TENANT'S principal office in Puerto Rico.

FORTY FIVE: Automatic Renewal - In the event TENANT does not vacate the Premises in the manner and under the conditions hereinbefore provided, within ninety (90) days after the normal expiration of the term hereof, LANDLORD shall have the option to be exercised at any time thereafter, to notify TENANT that the lease herein has been renewed for an additional term of ten (10) years from the date of the last normal expiration of the term hereof and, in such event, the parties agree that this Contract shall be held to have been renewed and to continue in full force and effect for such additional term of ten (10) years upon the mere mailing of such notice by LANDLORD to TENANT. This provision shall in no way prejudice, affect or deny any right which LANDLORD may otherwise have because, or at the time, of any such termination of the term hereof, particularly whenever LANDLORD does not exercise such option; it being agreed and understood that such renewal shall be upon the same terms and conditions contained herein except that the rental rate to be charged shall be the rate then currently

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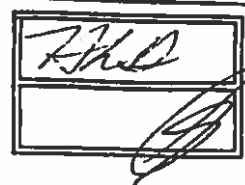
being charged by LANDLORD for similar building in the area, but in no event shall it be less than the rate herein stipulated.

FORTY SIX: Partial Invalidity and Applicable Law - If any term or provisions of this Lease or the application thereof to any person or circumstances shall, to any extent, be invalid or unenforceable, the remainder of this Lease and the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Lease shall be valid and be enforceable to the fullest extent permitted by law. This Contract is entered into and shall be interpreted in accordance with the laws of the Commonwealth of Puerto Rico.

FORTY SEVEN: Lease Termination and Holding Over - Upon the expiration or termination of this Lease:

(i) TENANT shall inform LANDLORD in writing of TENANT'S activities affecting each or any environmental area of concern during the period of TENANT'S operation, including a description from an environmental standpoint of the physical conditions of the premises and landsite. TENANT shall also inform to LANDLORD in writing of any environmental regulatory violations, compliance plans, permits, closure plans, clean-up actions or any other regulatory procedures related to the operation. In the event that the information reveals TENANT'S noncompliance of any of the above, or in the event that a physical inspection of the Premises and adjacent areas by LANDLORD, or any other source of information reveal the possibility of contamination, in that event, TENANT shall, at LANDLORD'S request submit a plan of action with the appropriate financial provisions to execute it. LANDLORD shall hold TENANT responsible for any and all environmental damage, or any damage to third parties as a result of any environmental damage, or any remedial action (including monitoring) to be performed at landsite or otherwise as a result of TENANT'S operations after termination of Lease and until such a time as complete remediation or fulfillment of TENANT'S obligations is effected. In case TENANT fails to comply with the foregoing provisions, LANDLORD may elect to effect them at TENANT'S expense and responsibility.

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(iii) TENANT shall remove all hazardous and toxic substances belonging to TENANT or to a third party. TENANT shall also remove all other property of TENANT and that of any third party and failing so to do, TENANT hereby appoints LANDLORD its agent so that LANDLORD may cause all of the said property to be removed at the expense and risk of TENANT. TENANT covenants and agrees to give full and timely observance and compliance to this covenant to remove all its property and surrender the Premises broom clean. TENANT hereby agrees to pay all reasonable necessary cost and expenses thereby incurred by LANDLORD. If, as the sole result of the removal of TENANT'S property any portion of the Additional Premises or of the building of which they are a part, are damaged, TENANT shall pay to LANDLORD the reasonable cost of repairing such damages unless due to the gross negligence of LANDLORD, its agents, servants, employees and contractors. TENANT'S obligation to observe or perform this covenant shall survive the expiration or other termination of the term of this Lease.

FORTY EIGHT: Change of Address - TENANT shall promptly notify LANDLORD of any change in the addresses other than those required from it in Article SEVEN hereof.

FORTY NINE: TENANT will indemnify LANDLORD for any and all liability, loss, damages, expenses, penalties and/or fines, and any additional expenses including any attorney fees LANDLORD may suffer as a result of claims, lawsuits, demands, administrative orders, costs, resolutions or judgements against it arising out of negligence and/or failure of TENANT or those acting under TENANT to conform to the statutes, ordinances, or other regulations or requirements of any governmental authority, be it Federal, of the Commonwealth of Puerto Rico, its instrumentalities or public corporations, in connection with the performance of this Lease.

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**FIFTY**: Inasmuch as TENANT is presently in possession of the demised premises pursuant to a certain Lease Contract executed between the parties hereto, TENANT hereby accepts the Premises in their present condition.

**FIFTY ONE**: TENANT shall, at its own cost and expense, construct and/or install all necessary equipment required to connect the building's electrical system to the Puerto Rico Electrical Power Authority's electrical distribution lines, such connection to be made in compliance with the requirement of PREPA.

**FIFTY TWO**: Anything contained in this Contract to the contrary notwithstanding, if required by TENANT, it shall be at TENANT's own cost and expense the construction and/or installation of a sprinkler system; it being agreed and understood that such construction shall be in accordance with the provisions hereof.

**FIFTY THREE**: TENANT shall, at its own cost and expense, install a fire protection system and shall obtain the endorsement and approval from said Fire Department for such installation. TENANT must also provide security measures to prevent or reduce fire hazard due to the storage of inflammable materials and products.

**FIFTY FOUR**: TENANT hereby acknowledges that in the industrial park there are other industries; therefore TENANT hereby specifically agrees and undertakes to take such steps and install such equipment as may be necessary to prevent that any hazard and/or noise which may be created by its operations may in any way or manner unduly affect the operations of the other industries and therefore TENANT hereby releases and saves LANDLORD harmless from any and all claims or demands arising therefrom or in connection therewith.

**FIFTY FIVE**: TENANT must comply with the rules and regulations of pre-treatment established by the Puerto Rico Aqueduct and Sewer Authority, the Environmental Quality Board and the Environmental Protection Agency related to the effluent industrial discharge in the sanitary sewer system and their final disposition. Also, any improvement necessary to provide pre-treatment facilities for the above mentioned effluents shall be at TENANT'S own cost and expense and in coordination and with the approval of LANDLORD's Engineering and Maintenance Departments.

**FIFTY SIX**: TENANT shall procure and obtain a permit for the operation of a solid waste emission source from the Environmental Quality Board and authorization for the Office of Solid Waste and/or from the Municipality of Ponce for the final disposition of wastes.

**FIFTY SEVEN**: TENANT, at its own cost and expense, shall implement the necessary measures and install the control equipment to maintain the atmospheric air quality levels in compliance with the environmental laws and regulations of the Environmental Quality Board and the Environmental Protection Agency, as promulgated by any succeeding law or regulations.

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*H.E.D.*  
*[Signature]*



**FIFTY EIGHT:** It is hereby agreed and understood that TENANT shall take the necessary steps to comply with the regulations and law requirements of the PUERTO RICO OCCUPATIONAL SAFETY AND HEALTH OFFICE (PROSHO).

**FIFTY NINE:** TENANT hereby acknowledges that it has been informed by LANDLORD and is conscious of the fact that in other sections of the building in which the premises herein demised forms part, there exist or may hereafter be established, certain industries whose products and/or operations may be affected by the operation to be carried out by TENANT herein. TENANT hereby commits itself that it will, at its own cost and expense, take the necessary measures within its premises, to avoid causing any hazard to existing nearby industries or to any industries which, hereafter, may be established in Project No. M-1216-0-77. TENANT hereby further agrees that LANDLORD shall not in any event whatsoever, be liable for any damages which may be suffered by any other Tenant located within the building of which the demised premises form part, caused by TENANT's operations thereat.

**SIXTY:** Should TENANT be denied tax exemption under the Industrial Incentives Act of Puerto Rico for the production of eligible manufactured products as defined in said Act, for which it has applied, or will promptly apply, to the Office of Industrial Tax Exemption, then, TENANT at its option, to be exercised within thirty (30) days after having been notified of such denial, may cancel and terminate this contract; provided, however, that TENANT shall be liable, until satisfied in full, for all its obligations hereunder, including, but without limitation, the payment of rent, prior and up to the date it exercises such option and delivers the premises to LANDLORD, and upon performance of all such obligations TENANT shall be thereafter free and fully released from this lease contract.

**SIXTY ONE:** TENANT certifies and guarantees that at the date of subscribing this Contract it has submitted the Corporate Tax Returns Forms during the last five (5) years and does not have any tax debt pending with the Commonwealth of Puerto Rico, or is complying with the terms of a payment plan duly approved.

TENANT also certifies and guarantees that at the date of execution of this contract it has paid unemployment insurance compensation, temporary disability insurance, and the driver's social security (as applicable); or is complying with a payment plan duly approved.

TENANT acknowledges that this is an essential condition of the Contract and if the above certification is incorrect in any of its parts, LANDLORD may cancel this contract.

**SIXTY TWO:** LANDLORD reserves the right to audit the leased premises from time to time during the term of this contract, as LANDLORD may deem necessary, in order to assess all aspects of the environmental condition of said premises and TENANT's compliance with all environmental legislation and regulations, under Commonwealth and federal law; TENANT hereby agrees to provide access to all areas and structures of the premises for these purposes, upon LANDLORD's request, and to also provide access to all books, records, documents and instruments which LANDLORD may deem necessary in order to fully audit the premises as herein stated.

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*[Handwritten initials]*



**SIXTY THREE:** TENANT shall furnish to LANDLORD, in addition to any other information, documents or instruments that may be required in this contract:

- a) Prompt written notice of the occurrence of any event that by law or regulation would require any oral, telephonic or written notice or communication to the US Environmental Protection Agency and/or to the Puerto Rico Environmental Quality Board, or any successor agency, and copies of all orders, notices or other communications and reports received, made or given in connection with any such event, and any enforcement action taken against TENANT or against any property owned, occupied or used by TENANT;
- b) Quarterly certifications subscribed by an authorized representative designated by TENANT, as to the environmental condition of the leased premises, containing the information required by LANDLORD, which is specified in the form included as **Annex "B"** of this contract, or any subsequent modification thereto;
- c) Any other information and documents relating to TENANT's compliance with environmental legislation and regulations under federal and commonwealth laws.

**SIXTY FOUR:** TENANT hereby guarantees to LANDLORD that, neither he, or any of its stockholders, in case of a corporation, owes any money to LANDLORD under its corporate name or any other corporate name and/or person.

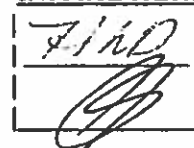
**SIXTY FIVE:** TENANT shall not transfer, lease, burden or dispose of in any way of the equipment used on its operations without the previous written notice of LANDLORD.

**SIXTY SIX:** TENANT shall not sell, lease or transfer in any way its operations to any other tenant without the previous written consent of LANDLORD.

**SIXTY SEVEN:** This Contract is made and entered into subject to and conditioned upon the endorsement and approval of the Planning Department of the Puerto Rico Industrial Development Company, the Office of Economic Studies of the Economic Development Administration and the Environmental Quality Board of Puerto Rico; provided that such approvals shall be understood to constitute conditions of this Contract, which if not complied with, shall entitle the LANDLORD to rescind this Contract.

**SIXTY EIGHT:** TENANT agrees to submit to LANDLORD within thirty (30) days from the date of execution of this Contract: (a) evidence of its registration in the Department of State of the Commonwealth of Puerto Rico and the name and address of its resident agent; and (b) a certificate of a resolution of its Board of Directors either authorizing or ratifying the execution of this Contract.

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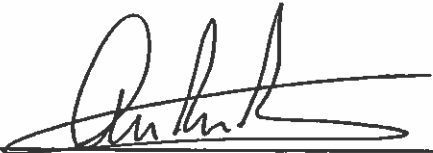





**SIXTY NINE:** Anything contained in this Contract to the contrary notwithstanding and provided that TENANT is complying with all terms and conditions and is not in default hereunder. TENANT shall exercise an option to cancel this contract before the expiration of its term with a six (6) months rent penalty, provided TENANT notifies LANDLORD in writing its intention to rescind the Contract at least sixty (60) days before exercising such option. However, it is hereby agreed and understood that TENANT shall continue to be liable for all its obligations hereunder, including without limitation, the payment of rent and the environmental conditions of the demised premises until the delivery of such premises to LANDLORD.

IN WITNESS WHEREOF, LANDLORD and TENANT have respectively signed upon proper authority this Lease, this 1 day of April 1998.

PUERTO RICO INDUSTRIAL DEVELOPMENT COMPANY

BY:  

CHECKPOINT SYSTEMS OF P. R., INC.

BY:   
66-036-9387





ANNEX "A"

**DESCRIPTION OF SECTIONS 3 & 4 (GROUPED) OF LOT NO. 6  
LOCATED AT INDUSTRIAL SUBDIVISION PARK SABANETAS  
PONCE, PUERTO RICO  
PROJECT NO. M-1216-0-77-04 & 05**

---

**LANDSITE:**

Section 3 and 4 (grouped) of Lot 6, located at Subdivision Park Sabanetas, Ponce, Puerto Rico.

It bounds: by the NORTH, with common access road of the same lot; by the SOUTH, with remnant of Lot No. 6 used as common park lot; by the EAST, with PR-52 Highway; and by the WEST, with Section No. 3 of the same lot.

It has an approximate surface area of 1,971.00 square meters, equivalent to .5015 "cuerda".

**LIENS AND ENCUMBRANCES:**

It is affected by a 25' feet wide right of way in favor of PREPA running along its East boundary.

**PROJECT NO. M-1216-0-77-04 & 05:**

This is a pitched roof type building consisting of reinforced concrete foundations, steel columns and steel girders supporting 30 ft. long steel joists, which in turn support gauge #22 galvanized steel deck covered by 1" fiberglass insulation and 3 ply built-up roofing. This building has no monitor, but roof ventilators are provided.

**Bay No. 4**

The structure consists of a main floor 60' - 00" x 69' - 0" out to out dimensions with an area of 4,140.00 sq. ft. of manufacturing space; one lean-to 16' - 2" x 10' - 6" for an area of 169.79 sq. ft. provided for sanitary facilities; entrance porch 8' - 1 1/4" x 6' - 6" for an area of 52.65 sq. ft. This amounts a total area of 4,362.44 sq. ft. of covered floor space.

**Bay No. 5**

The structure consists of a main floor 60' - 3" x 69' - 0" center to out dimensions, with an area of 4,157.25 sq. ft. of manufacturing space; one lean-to 16' - 2" x 10' - 6" for an area of 169.79 sq. ft. provided for sanitary facilities; entrance porch 8' - 1 1/4" x 6' - 6" for an area of 52.65 sq. ft. This amounts a total area of 4,379.69 sq. ft. of covered floor space.

The floor consists of a 4" thick reinforced concrete floor slab with a monolithic cement finish. Floor slab designed for a load capacity of 150 pounds per square feet.

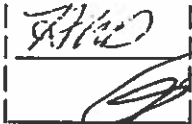
Exterior walls are of concrete blocks plastered and painted on both sides. Interior walls at the lean-to are plastered and painted together with a 6' - 1" high sprayed-on glazed finish wainscot.

Windows are Miami Aluminum type throughout the building.

Interior doors are made of plywood and exterior are industrial type metal ones.

Clearance in the manufacturing area from finished floor to lowest part of beams at the side eaves is 12' - 0 1/2".

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ANNEX "B"

COMPLIANCE REPORT OF WITH ENVIRONMENTAL REQUIREMENTS

In the period of March 98 to March 99

I. PERMITS

PERMITS NUMBER	EXPIRATION DATE	RENEWAL DATE (IF APPLY)
Air Emmissions PFE-IC-03-58-0195-0002-1-11-0	Jan 23, 2000	August 99
PRASA Pretreatment GDA-93-408-022	March 22, 1998	November 97 (In Process)

II. COMPLIANCE ACTIONS

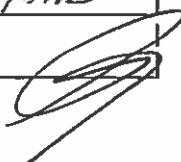
REFERENCE/CASE NUMBER	DATE	RESPONSE OF DATE OF
N/A		

III. CERTIFICATION

I certify, under penalty of law, that this document was prepared under my supervision and direction; and that was based in my investigation by the persons directly responsible of gathering the information, that the information here submitted is, according to my best judgment, certain, complete and precise.

Andrés Román

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And




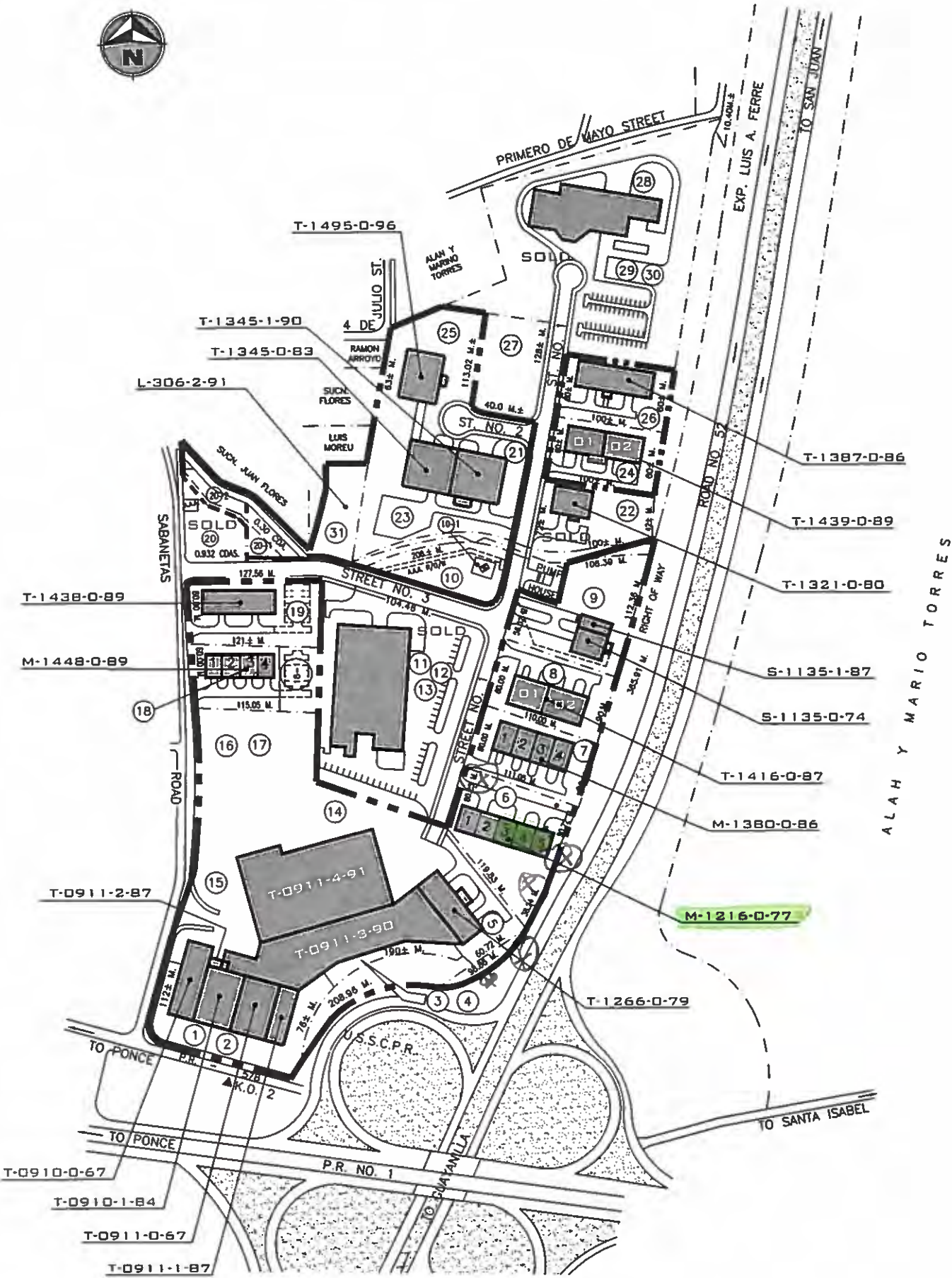
MUNICIPALITY OF PONCE  
SABANETAS INDUSTRIAL SUBDIVISION

L-306-0-66-00

⊕ MODULO 4 - NO ACT QUÍMICA - Empleo de prod. Terminados  
• • • 5 - ETCHING

L-306-1-72-00

L-306-2-91-00



LEGEND:

- LOT LIMIT
- PRIDCO PROPERTY LIMIT
- BUILDING
- ROADS OR CURB SIDE

CADASTRE NUMBER

MUNICIPALITY	MAP		BLOCK	PARCEL
	1:10,000	1:1,000		
63	389	057-067	006	000

SCALE NOT TO SCALE REV. DATE Julio - 2018  
DRAW DATE MAY - 21 - 1975 ZONING DI.1 (I-L)





MUNICIPALITY OF PONCE  
SABANETAS INDUSTRIAL SUBDIVISION

L-306-0-66-00

L-306-1-72-00

L-306-2-91-00

LOT NO.	AREA SQ. MTS.	AREA CUERDAS	BLDG. NO.	BLDG. AREA SQ. FEET	GENERAL INFORMATION
1/2	34,575.67	8.7969	T-0910-0-67	22,844.22	MEDTRONIC
3/4/5			T-0910-1-84	18,784.38	MEDTRONIC
			T-0911-0-67	21,936.32	MEDTRONIC
			T-0911-1-87	10,829.83	MEDTRONIC
			T-0911-2-87	3,432.00	MEDTRONIC
			T-0911-3-90	94,335.81	MEDTRONIC
			T-1266-0-79	23,102.84	MEDTRONIC
6	6,406.54	1.63	M-1216-0-77-01	4,380.53	PHASOR ENGINEERING
			M-1216-0-77-02	4,362.44	PHASOR ENGINEERING, INC.
			M-1216-0-77-03	4,362.31	VANGUARD CARIBE, LLC
			M-1216-0-77-04	4,362.44	ELSON, JUAN TORRES SUCESOR, INC.
			M-1216-0-77-05	4,379.69	SEÑORIAL BREWING CORP.
7	6,760.28	1.72	M-1380-0-86-01	5,775.65	ALTOL CHEMICAL ENV. LAB, INC.
			M-1380-0-86-02	5,775.65	ALTOL CHEMICAL ENV. LAB, INC.
			M-1380-0-86-03	5,775.65	ALTOL FOODS & DRINKS, INC.
			M-1380-0-86-04	5,758.82	ARTISOFT LABORATORIES, LLC
8	6,563.76	1.67	T-1416-0-87-01	11,395.44	VACANTE
			T-1416-0-87-02	11,260.74	TRANS TECH WASTE & RECYCLING
9	10,265.80	2.61	S-1135-0-74	11,439.68	SOLD
			S-1135-1-87	7,200.00	SOLD
10	8,995.94	2.2888			(LOT WITH PUMP HOUSE) RIGHT OF WAY
10-1	397.70	0.1011			GTP Towers, LLC.
11	9,197.12	2.34			SOLD-PRIME COMPUTER , INC.-11/20/80
12	8,175.22	2.08			SOLD-PRIME COMPUTER , INC.-11/20/80
13	7,192.62	1.83			SOLD-PRIME COMPUTER , INC.-11/20/80
14/15	27,905.79	7.0999	T-0911-4-91	115,787.00	MEDTRONIC
16/17					MEDTRONIC - Parking
16-1	924.03	0.2351			TO BE CEDED - AAA
18	5,239.5775	1.3331	M-1448-0-89-01	5,768.26	RC SPECIAL & STREET METAL, CORP.
			M-1448-0-89-02	5,745.63	PRIME JANITORIAL
			M-1448-0-89-03	5,745.63	PRIME JANITORIAL
			M-1448-0-89-04	5,768.26	AMN BUSINESS FORMS
18-1	1,901.6064	0.4838			VACANTE
19	7,546.35	1.92	T-1438-0-89	22,656.20	PJ ROSALY ENTERPRISES, INC. h/n/c ISLANDWIDE EXPRESS
20	3,663.35	0.932			SOLD-MR. JOAQUIN JIMENEZ & WIFE - 8/4/03
	150.00	0.04			PUMP STATION-A.A.A
20-1					DTPW
20-2	1,197.36	0.30			
21/23	16,141.74	4.10	T-1345-0-83	45,811.02	UNIVERSIDAD INTERAMERICANA DE PR-RECINTO PONCE
			T-1345-1-90	22,433.68	UNIVERSIDAD INTERAMERICANA DE PR-RECINTO PONCE
22 (U)	6,421.08	1.63	T-1321-0-80	11,457.10	SOLD- JUNE , INC. - 7/31/98
24 (U)	5,945.11	1.51	T-1439-0-89-01	11,395.45	INTER. COFFEE VENDORS, INC.
24 (U)	5,945.11	1.51	T-1439-0-89-02	11,260.75	TONY WHITE, INC.
25 (U)	7,632.82	1.94	T-1495-0-96	24,272.78	CLINICALMEDICALSERVICES, INC.
26	5,995.42	1.52	T-1387-0-86	22,662.45	LA PONTIFICA UNIV. CATOLICA

U - INDUSTRIAL PARK DEVELOPED WITH EDA FUNDS.

LEGEND:

----- LOT LIMIT

■■■■■ PRIDCO PROPERTY LIMIT

===== BUILDING


———— ROADS OR CURB SIDE

CADASTRE NUMBER

MUNICIPALITY	MAP		BLOCK	PARCEL
63	1:10,000	1:1,000		
	389	057-067	006	000

SCALE NOT TO SCALE    REV. DATE Julio - 2018

DRAW DATE MAY - 21 - 1975    ZONNING DI.1 (I-L)



**PRIDCO**  
PUERTO RICO INDUSTRIAL DEVELOPMENT COMPANY



MUNICIPALITY OF PONCE  
SABANETAS INDUSTRIAL SUBDIVISION


L-306-0-66-00

L-306-1-72-00

L-306-2-91-00

	LOT NO.	AREA SQ. MTS.	AREA CUERDAS	BLDG. NO.	BLDG. AREA SQ. FEET	GENERAL INFORMATION
L-306-1-72	27	7,282.63	1.85			SOLD- CHECKPOINT SYSTEMS OF PR -12/20/96
	28	8,260.90	2.10			SOLD- CHECKPOINT SYSTEMS OF PR -6/20/90
	29	9,186.51	2.33			SOLD- CHECKPOINT SYSTEMS OF PR - 6/20/90
	30	9,627.50	2.44			SOLD- CHECKPOINT SYSTEMS OF PR - 2/7/00
L-306-2-91	31	4,912.99	1.25			ESSILOR INDS. CORP.

U - INDUSTRIAL PARK DEVELOPED WITH EDA FUNDS.

LEGEND:  - - - - - LOT LIMIT - . . . - PRIDCO PROPERTY LIMIT - - - - - BUILDING - - - - - ROADS OR CURB SIDE	C A D A S T R E   N U M B E R				
	MUNICIPALITY	MAP		BLOCK	PARCEL
		1:10,000	1:1,000		
	63	389	057-067	006	000
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DRAW DATE    MAY - 21 - 1975    ZONNING    DI.1 (I-L)					



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7C

March 30, 1989

**ATKEARNEY**

Mr. Ben Singh  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, New York 10278

Reference: EPA Contract No. 68-01-7038; Work Assignment  
No. R02-01-54; Checkpoint Systems, of Puerto Rico,  
San Juan, Puerto Rico; EPA I.D. No. PRD 091126037;  
Final Deliverable

Dear Mr. Singh:

Enclosed please find the Interim RCRA Facility Assessment Report (RFA) for the Checkpoint Systems of Puerto Rico facility. This report presents the results of the Preliminary Review (PR) and the observations and findings of the Visual Site Inspection (VSI) and information obtained during a Sampling Visit (SV).

The Checkpoint Systems facility is a two-acre industrial plant site which has been in operation since 1979. The plant manufactures electronic aluminum labels that are used as theft prevention devices on consumer products. The manufacturing process involves the etching of aluminum with ferric chloride and muriatic acid solutions resulting in the generation of corrosive wastewater. The wastewater is recycled back to the etching process until totally spent. Other wastes generated at the facility include scrubber blowdown from the exhaust system associated with the etching baths. Trichloroethane is used at this facility in conjunction with the aluminum label adhesive application.

This RFA resulted in the identification of ten Solid Waste Management Units (SWMUs) and two Areas of Concern (AOCs). The following units were identified:

- Lagoon A (SWMU 1)
- Lagoon B (SWMU 2)
- Lagoon C (SWMU 3)
- Storage Tanks A and B (SWMU 4)
- Scrubber Water Tank (SWMU 5)
- Scrubber (SWMU 6)
- Tanker Truck (SWMU 7)
- Empty Drum Storage Area (SWMU 8)
- Dumpster with Aluminum Shavings (SWMU 9)
- Scrubber Water Tank Drainage Area (SWMU 10)



March 30, 1989  
Mr. Ben Singh  
Page 2

In addition, two AOCs were identified at the Checkpoint Systems facility. These include:

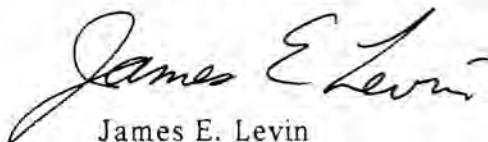
Spill overflow area  
Raw acid storage area

To determine the extent of releases from the units for which there is documented evidence of release, and to collect information from the other units for which there is a potential for release, a sampling strategy for Checkpoint Systems was developed by the Kearney Team. This strategy is included in the Sampling Plan submitted as Attachment A to this report.

A sampling visit (SV) was conducted in March 1989 to collect samples from areas of known or suspected release identified during the preliminary review and visual site inspection. The SV involved sampling ground water in existing monitoring wells to verify monitoring conducted by the facility from 1985 to 1987 which showed no evidence of contamination. In addition, surface soil samples were collected from areas where staining was apparent or spills had been documented to determine if releases had occurred. The analytical results from the SV were not available by completion of this report.

Please call me or Shawn Delorey, the Work Assignment Manager (who can be reached at (703) 836-6210), if you have any questions.

Yours truly,



James E. Levin  
Technical Director

Enclosure

cc: A. Chang, EPA Region II  
C. Saunders  
K. Allison  
S. Delorey  
E. Gray, HLA-H



INTERIM RCRA FACILITY ASSESSMENT REPORT

CHECKPOINT SYSTEMS OF PUERTO RICO, INC.  
PONCE, PUERTO RICO  
EPA I.D. No. PRD 091126037

Prepared for:  
U.S. Environmental Protection Agency, Region II  
26 Federal Plaza  
New York, New York 10278

Contract No. 68-01-7038  
Work Assignment No. R02-01-54

Prepared by:  
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March 1989



INTERIM RCRA FACILITY ASSESSMENT REPORT  
CHECKPOINT SYSTEMS OF PUERTO RICO, INC.  
PONCE, PUERTO RICO  
EPA I.D. NO. PRD 091126037

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INTERIM RCRA FACILITY ASSESSMENT REPORT  
CHECKPOINT SYSTEMS OF PUERTO RICO, INC.  
PONCE, PUERTO RICO  
EPA I.D. NO. PRD 091126037

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## EXECUTIVE SUMMARY

This document represents the interim report on the RCRA Facility Assessment (RFA) of the Checkpoint Systems of Puerto Rico (Checkpoint) facility located in Ponce, Puerto Rico. A Preliminary Review (PR) of available documentation (EPA Region II and Puerto Rico Environmental Quality Board - EQB files) and a Visual Site Inspection (VSI) were conducted in November 1988.

The Checkpoint systems facility is a two acre site which has been in operation since 1979. The plant manufactures electronic aluminum labels that are used as theft prevention devices on consumer products. The manufacturing process involves the etching of aluminum with ferric chloride and muriatic acid solutions. This process generates a corrosive wastewater stream which is recycled back to the etching process until totally spent. Other wastes generated include scrubber blowdown from the exhaust system associated with the etching baths. Trichloroethane is used at this facility in conjunction with the label adhesive application. The use of this solvent, together with the soil staining observed at several units during the VSI, resulted in a moderate to high potential for release of hazardous constituents to soil and groundwater.



A sampling visit (SV) was conducted in March 1989 to determine if a release of hazardous constituents had occurred from those units suspected or known to have released waste. Surface soil samples were collected from areas of obvious soil staining, facility drainage areas, and an area in which a spill of hazardous waste (D002) had been documented. In addition, three of four existing facility groundwater wells were sampled in order to verify results of quarterly sampling conducted by the facility from 1985 to 1987 in which no groundwater contamination was determined.



## 1.0 PRELIMINARY REVIEW/VISUAL SITE INSPECTION

### 1.1 Introduction

This section presents the results of the Preliminary Review (PR) and Visual Site Inspection (VSI) portions of the RCRA Facility Assessment (RFA) of the Checkpoint Systems facility located in Ponce, Puerto Rico. This site is an industrial plant which has been in operation since 1979. The plant manufactures electronic aluminum labels used on consumer products as theft prevention devices.

The objectives of this RFA include:

1. Identifying all past and present solid waste management units (SWMUs) and other areas of concern (AOC) at the Checkpoint Systems facility.
2. Collecting SWMU-related data from file reviews; conducting visual site inspection; and evaluating these data to assess the potential for release of hazardous waste or constituents from each SWMU.
3. Identifying the need for further actions. The findings, conclusions, and suggested actions in this report are based on:
  - a. A desk-top study of the RCRA permitting, compliance, and enforcement files; Compliance Inspection Reports; correspondence; and closure plans obtained from EPA Region II and the Puerto Rico Environmental Quality Board (EQB). A list of references used in the preparation of this report is provided in Section 1.6.



- b. A visual site inspection (VSI) of the facility was performed on November 16, 1988. Findings of the VSI are presented in Section 1.8.

Section 1.2 of this report presents a description of the facility including site history, waste management activities, and compliance history. The environmental setting for the facility is described in Section 1.3. A description of the SWMUs are presented in Section 1.4. Section 1.5 presents a description of Areas of Concern. Section 1.6 includes conclusions and suggestions for further action. Section 1.7 provides a list of references used in preparation of this report. Section 1.8 provides a Visual Site Inspection Summary.

## 1.2 Facility and Process Descriptions

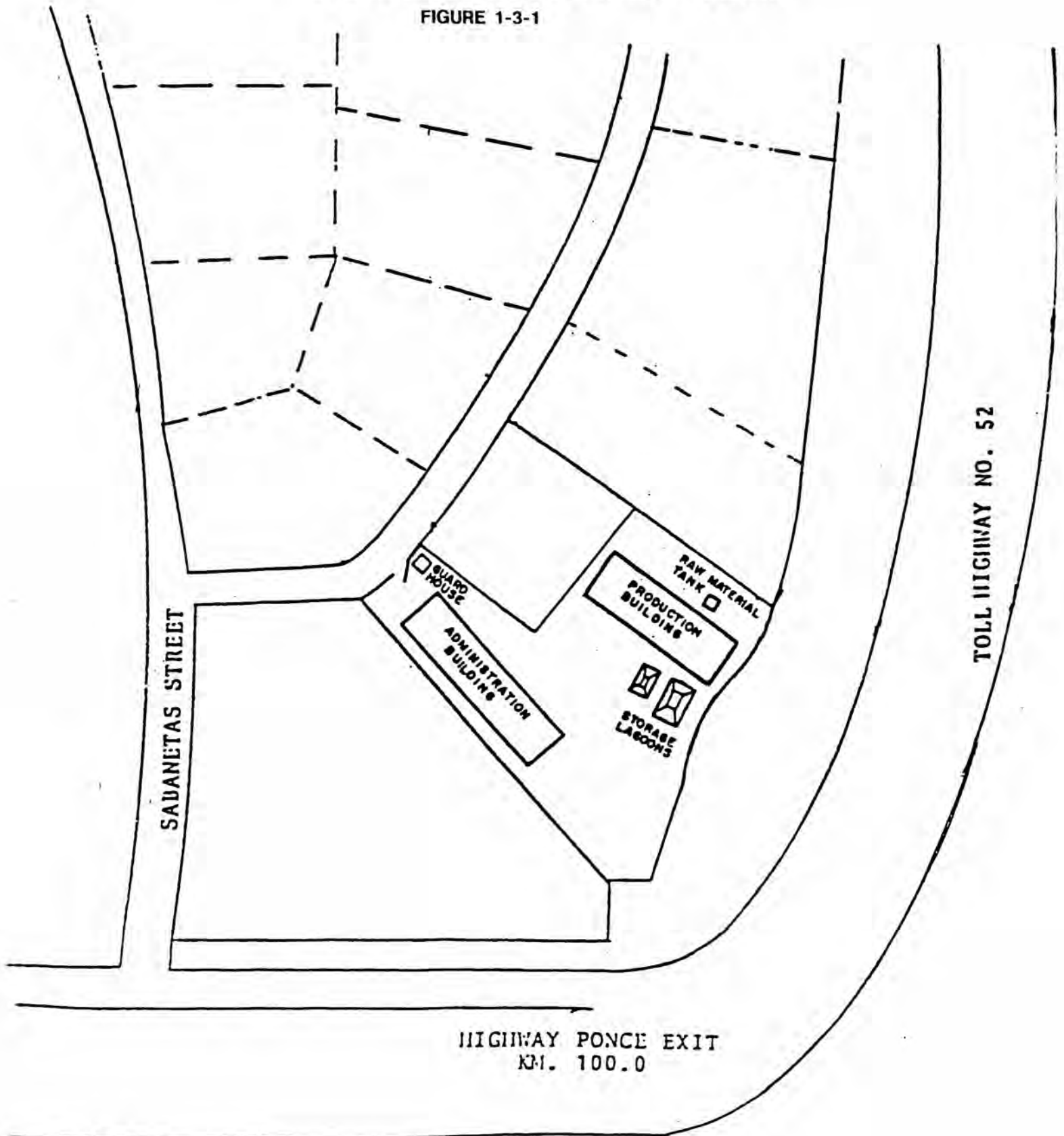
The Checkpoint Systems facility is located in the Sabanetas Industrial Park, in Ponce, Puerto Rico. It is located in the south-central portion of Puerto Rico, at latitude 18 degrees, 00 minutes, 36 seconds and longitude 66 degrees, 34 minutes, 28 seconds (see Figure 1-2-1). The facility covers an area of approximately 2.0 acres (1).

The Checkpoint Systems facility began operations in 1979. The facility is involved in the manufacture of electronic aluminum labels that are used on consumer products as theft



Checkpoint Systems of Puerto Rico Inc.  
SABANETAS INDUSTRIAL PARK

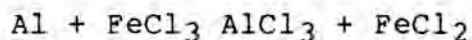
FIGURE 1-3-1



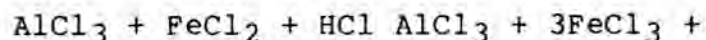


prevention devices. The raw materials used in the process are aluminum, paper, clorox, hydrochloric acid, ferric chloride, adhesive glue, and trichloroethene (a solvent used in conjunction with the adhesive application) (3).

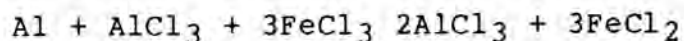
The manufacturing process consists of etching a roll of aluminum paper with ferric chloride according to the following unbalanced reaction (3):



Hydrochloric acid is added in order to prevent the formation of hydroxides which can settle out and cause clogging problems. This results in the conversion of ferrous chloride back to ferric chloride as follows (3):



As the etching strength of the solution decreases, fresh ferric chloride solution is added to strengthen the original solution which is hindered by aluminum build up (3):



At certain aluminum concentrations, the reaction slows to the point of being uneconomical and a new etching solution must be used. After the etching process, the aluminum roll is



heat sealed with a plastic paper to form a web, which is then cut, packaged and transported for sale (3).

The generated wastewater of the process contains ferric chloride, aluminum chloride, and muratic acid (hydrochloric acid and water). The generated wastewater was initially discharged into two on-site lined surface impoundments, Lagoons A and B (SWMUs 1 and 2) prior to October 1983. The capacity of each surface impoundment was approximately 200,000 and 83,200 gallons, respectively (2). Both lagoons were lined with chlorinated polyethylene fabric layers with a total thickness of 36 mils (1). In addition to these two lagoons, a trial evaporation pond (Lagoon C) (SWMU 3) with an approximate capacity of 5000 gallons was constructed and used for less than one week. This smaller lagoon was also lined with chlorinated polyethylene fabric layers, as above.

The lagoons were originally intended as evaporation ponds. However, heavy rains in the area increased the volume of liquid stored in these lagoons, which increased the volume of waste which had to be disposed off site by an independent contractor. In addition, a lawsuit was filed against Checkpoint by the tenant of an adjacent building complaining about excessive equipment corrosion due to release of acidic fumes from the lagoons' wastewater. These reasons led Checkpoint Systems to close the lagoons (1).



During July through December 1983, liquid levels were reduced in the lagoons through off-site disposal and evaporation in preparation for their removal. By January 1984, the remaining sludge was removed, the lagoons washed and vacuumed, and the liners rolled up (3). Environmental Quality Board (EQB) personnel collected verification soil samples from underneath the lagoons liners after the liners were removed. According to the facility manager these samples were misplaced and/or samples exceeded holding times, and a second visit to collect soil samples was performed sometime during the spring of 1984. During the summer of 1984, Checkpoint Systems filled the lagoon areas with clean soil brought in from an off-site source (1).

In August 1983, two 12,000 gallon fiberglass storage tanks (Tanks A and B) (SWMU 4) were built to replace the evaporation lagoons. These two tanks have been in operation since October 1983 (1). A secondary containment system consisting of a concrete dike surrounding the concrete tank pad structure was included in the tank structure design. One of the tanks stores used ferric chloride (containing aluminum) which is recycled back into the process after the addition of fresh ferric chloride solution. The other tank stores waste ferric to be hauled off site. According to facility personnel, the wastewater stored does not remain in the tanks longer than 90 days (11).



An approximate volume of 10,000 gallons of waste water is hauled from the facility by Services Carbareon every two weeks and, according to the facility manager, taken to the U.S. mainland for sale to wastewater treatment facilities for use as a flocculant. Fresh raw material is brought into the facility at the approximate rate of 10,000 gallons per month. The waste to be disposed is pumped from the 12,000 gallon waste tank into a Tanker Truck (SWMU 7) which has a plastic lined interior. The Tanker Truck remains empty or with tank residues when it is not in operation (1).

#### Permit and Compliance History

On February 25, 1982 the EQB requested Checkpoint Systems to notify EPA of any hazardous waste activity at the facility (1). Checkpoint Systems submitted Part A Permit Application as a generator and Treatment, Storage, Disposal (TSD) facility on March 18, 1982 (2). The company was found to be in non-compliance with 40 CFR 270.10(e) (permitting requirements) from November 19, 1980 to March 18, 1982 (1).

The EQB conducted two separate full RCRA Inspections on June 3, and October 29, 1982, respectively. During the first inspection of June 3, 1982, the EQB reported the use of two lagoons (SWMUs 1 and 2) with capacities of 200,000 and 600,000



gallons to store waste (4) (5). The second inspection, performed on October 29, 1982, revealed both lagoons did not comply with the two-foot freeboard requirement. In addition, several deficiencies were found in the documents submitted as part of the Part A Permit Application (1).

Another full RCRA inspection was performed on April 19, 1983 by personnel from EPA. During this inspection, samples of the lagoon waste water were collected, and in addition an experimental evaporation lagoon (Lagoon C) (SWMU 3) with a capacity of of 5,000 gallons was identified. According to EQB documentation, Checkpoint Systems had not notified the regulatory agencies of the existence of this lagoon (1).

On May 27, 1983, Checkpoint Systems submitted an Incident Report regarding an overflow spill which occurred on May 9, 1983 from the facility's waste storage lagoons (Lagoons A and B) (6). The waste water solution consisting of water, ferric chloride, aluminum chloride, and hydrochloric acid overflowed to a nearby off-site area where it remained in puddles. The liquid was removed from the ground surface using portable pumping equipment. Soda ash was dispersed onto the soil to neutralize the remaining liquid. After neutralization of the soil was achieved, the surface soil where the liquid was



spilled was removed and dumped inside one of the lagoons (the report does not specify which lagoon, but it is inferred to be Lagoon B, given its proximity to the spill area) (6). Soil sampling to verify decontamination was never conducted.

Checkpoint Systems decided to close the lagoons (surface impoundments) since they were not economical. Heavy rains in the area were significantly increasing the volume of waste to be disposed. In addition, a lawsuit was filed by a neighbor complaining of excessive corrosion of his equipment by fumes and vapors from the lagoons (1).

On June 2, 1983, a letter was sent from EQB to Checkpoint Systems requiring the company to initiate a groundwater monitoring program. Checkpoint submitted a revised Part A on August 8, 1983 informing EQB of their decision to close the lagoons and to substitute them with two tanks. EQB requested a closure plan (CP) and a guidance checklist on closure of surface impoundments was forwarded to Checkpoint Systems. On November 14, 1983, Checkpoint Systems submitted their closure plan. The plan was reviewed by EQB and found to be deficient. A revised closure plan was later submitted by Checkpoint Systems (1) (3). There is no information currently available regarding whether the revised closure plan was approved by EQB.



From December 1983 to January 1984, the sludge from the lagoons was removed, the lagoons were washed and vacuumed, and the liners rolled up and removed. On December 28, 1983, EQB collected decontamination verification soil samples from the bottoms and walls of the former storage lagoons. In addition, two background soil samples were collected from areas believed to be free of contamination to serve as comparison samples. Some of the samples collected were split with Checkpoint Systems (1) (3). However, EQB was forced to perform an additional sampling on May 7, 1984, since the first set of samples were misplaced or mishandled. The results of the chemical analyses on the second set of samples indicated no concentrations of compounds high enough to indicate contamination. During the summer of 1984, Checkpoint Systems filled in the lagoon areas with off-site soil fill converting the area into a car parking lot (1).

From January 31, 1985 to February 4, 1985 four monitoring wells were installed at the site by Jaca, Sierra & Rivera Geotechnical Engineers and Testing Laboratories of Ponce, Puerto Rico (7). Checkpoint Systems monitored groundwater conditions for two years as agreed with EQB. No concentrations of compounds at levels high enough to indicate contamination was detected in any of the monitoring well water samples analyzed (1).



On November 12, 1987, EPA informed Puerto Rico EQB that the certification for closure from Checkpoint Systems and the EQB acceptance letter for the closure were received. In the letter EPA stated that they accepted EQB's determination; however, they would not terminate the facility's Interim Status until decisions on corrective action were finalized (9).

In March, 1985, the U.S. EPA notified Checkpoint Systems requirements of the Hazardous and Solid Waste Amendments of 1984, and requested information regarding Solid Waste Management Units (SWMUs) (8).

On April 12, 1985, Checkpoint Systems in their SWMU information response letter, stated that there were no SWMUs existing or closed at the facility (10). These statements were found to be in direct contradiction with information previously obtained through reports and field inspections. On November 4, 1986 a Consent Agreement and Consent Order (Docket No. II RCRA-86-0307) by the U.S. EPA, Region II was submitted to Checkpoint Systems. Under this order, Checkpoint Systems was fined \$3,500 in penalties for these violations (10).



### 1.3 Environmental Setting

#### 1.3.1 Meteorology

The climate of Puerto Rico is influenced by easterly winds and cold fronts carried by trade winds from the northeast. The easterly winds carry moist air from the northeast which rises and cools as it moves inland causing rain showers. The weather from May to November is characterized by cloudiness and rain and occasional tropical storms, flooding rains, and hurricanes which are a result of the easterly winds. The cold fronts moving over the southeastern United States pass over Puerto Rico from November to April, bringing several days of continuous rainfall. The mean annual precipitation is 82 inches (1).

#### 1.3.2 Floodplain and Surface Water

The Checkpoint Systems facility is located approximately 3 miles north of the Caribbean Sea and lies in the gentler slopes southward of "Cerro los Negrones" hill. Surface waters near the facility include a small intermittent stream located approximately 1/2 mile to the north and Bucana River located approximately 2 miles east of the facility. The intermittent stream flows in an eastward direction while Bucana River flows in a southward direction (See Figure 1-3-1) (1).



FIGURE 1-3-1



### 1.3.3 Geology and Soils

The subsurface geology at the Checkpoint Systems site was described in a technical report by Jaca, Sierra, and Rivera Geotechnical Engineers dated February 15, 1985. This report was based in a literature research and drilling experience in the Ponce area, and test boring/monitoring well installations at the site. In general, the subsurface stratigraphy described represents typical alluvial deposition overlying limestone bedrock (7).

The subsurface geologic horizons identified at the site consisted of a fill material composed of calcareous silt, clay, and limestone gravel where present and ranging to a maximum thickness of 6.0 feet. The underlying unit consisted of a dark-brown dense clay mixed with silt and sand extending to 13.0 to 18.0 feet below ground surface. Organic traces were present predominantly in the upper layers while the silt and sandy portion increased with depth in this unit. A very loose saturated coarse sand and gravel with lenses of fine sand and silt was encountered underneath the dense clay. This sand and gravel layer extended to depths between 23.5 and 28.0 feet below ground surface. Below the sand and gravel layer a gray colored very dense and plastic clay changing into a sandy



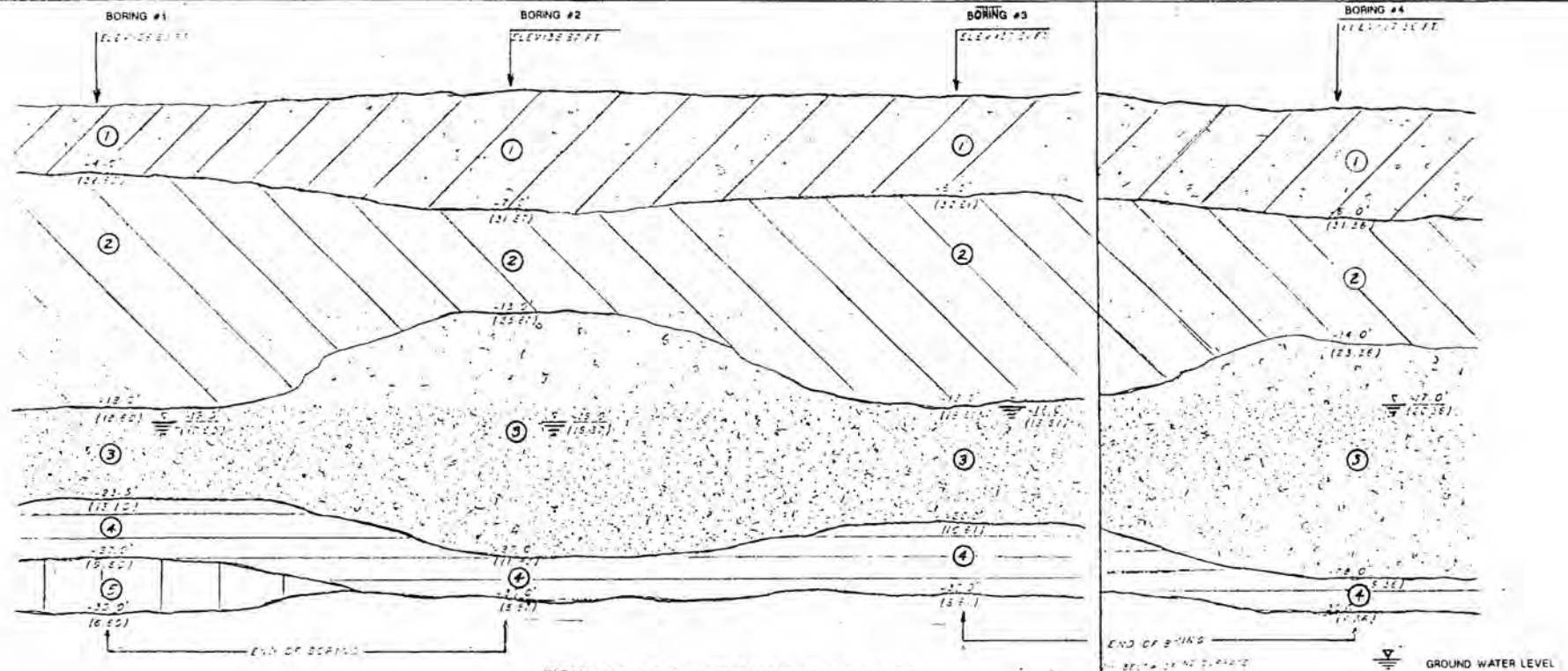
clay with depth was encountered to the borings termination depth of 30.0 feet. A generalized soil profile is presented on Figure 1-3-2 (7).

The authors interpret the gravel and sand unit to have been likely deposited by a swift flowing, steep gradient stream and representing deltaic-like deposition where an intermixture of advancing continental sedimentation met the shallow marine sediments. The underlying heavy clay sediments were laid-down in a shallow coastal basin with the limestone beds close to surface. This clayey layer is interpreted as an aquiclude to higher permeable and transmissible coarse sand and gravels above it (7).

#### 1.3.4 Groundwater

The Checkpoint Systems facility lies in the southern foothills of Los Negrone Hill which gently slope to the Caribbean Sea to the south. Surface elevation at the facility is approximately 38 feet above mean seal level (msl). Deep groundwater sources in the area are not reported, although it is presumed they lie within the limestone basement (7). The limestone basement has not entirely been characterized with regard to its permeability and transmissibility. Shallow groundwater at the site lies within the overlying unconsolidated layers in the coarse sand and gravel unit (1).





## LEGEND

- 1) YELLOW TAN CALCAREOUS, CLAY AND LIMESTONE GRAVEL (CALICHE FILL)
- 2) DENSE CLAY MIXED WITH SILT AND SAND, TRACE ORGANIC (TOP SOLUMLY PLASTIC)
- 3) FINE TO COARSE SAND AND GRAVEL, OCCASSIONALLY SANDY SILT AND CLAY
- 4) DENSE CLAY-LIKE PLASTIC
- 5) SANDY BUT SOME CLAY DISPOSABLE PARTICLES



Figure 1-3-2



The coarse sand and gravel aquifer depicts channel deposition from a meandering river. The lateral stratigraphic variations observed at the site indicated the presence of an old buried channel or elbow of a meandering stream, with varying lateral sediment characteristics. Other investigations report transmissivities of close to 75,000 gallons per day per foot in this aquifer in the region. The high transmissibility is the result of high permeability given the aquifer grain size distribution. The alluvial materials have been described by other investigators as "...lenticular and discontinuous, grading laterally from one kind of alluvial material to another...". The sand and gravel aquifer materials were transported from the west, or east, as the meandering stream changed its horizontal and vertical position in its lateral migration (7). A summary of monitoring well construction details at the site is presented on Table 1-3-1. The location of the monitoring wells is presented on the site plan Figure 1-3-3.

The recharge characteristic for this shallow aquifer is not well understood due to the physiographic configuration of the area and the alteration of the natural terrain by man. At approximately 400 meters north of the site, limestone ridges and hills are present. Although the strike and dip of the limestone units is not reported, the limestone unit is



TABLE 1-3-1  
SUMMARY OF MONITORING WELL CONSTRUCTION DETAILS

Monitor Well Number	Date Installed	Depth Below (1) Land Surface (ft)	Surface (2) Elevation (ft-msl)	Interval Depth (ft) (3)
MW-1	02/01/85	30.0	36.60	13.0 - 23.0
MW-2	01/31/85	30.0	38.87	13.0 - 23.0
MW-3	01/31/85	30.0	38.61	14.0 - 24.0
MW-4	02/04/85	30.0	37.36	13.0 - 23.0

(1) Total depth drilled below land surface.

(2) Total feet above mean sea level (msl).

(3) Depth range below land surface.



FIGURE 1-3-3



inferred by the authors to be present beneath the site, and thus "discarding the presence of a deeper aquifer based on the stratigraphic and lithologic situation". The limestone ridges extending along the northern limits of the shallow aquifer, as well as the intense filling and compaction over the original terrain, precludes or limits vertical flow and vertical recharge. Lateral inflow and lateral seepage is considered of more importance as a recharge source through the porous meandering buried channels. The physiographic location and geologic stratigraphy of the aquifer indicates a net groundwater flow southward, in which the section of the aquifer underneath the site has a small role in the overall shallow aquifer regional configuration. If the main aquifer body constitute old buried channels created by the Bucana or Inabon Rivers, then a high hydraulic conductivity which facilitates a high groundwater flow southward is likely (7).

Groundwater is encountered at the site from 17 to 19 feet below surface. The groundwater levels at the site are also reported as fluctuating with seasonal variations and expected to be higher (closer to surface) during the rainy season. Two permeability tests were conducted at locations where the base of the artificial ponds existed within the property. The tests were performed at the intermediate zone of the second layer, approximately 8 feet from ground surface in the silty



clay horizon. Percolation rates of approximately one (1) inch in two (2) minutes were obtained. Slower percolation rates would be expected in the denser lower portion of this unit (7).

#### 1.3.5 Receptor Information

The Checkpoint Systems facility is located in an industrial park. The surrounding land use is for industrial purposes also. To the east of the industrial park, Villa Flores, a village with multi-family residence housing and shops exists. To the south and east of the site, across Highway 1 and 52, respectively, vacant lots where sugar cane may be grown are present. North of the Industrial Park, in the foothills of Los Negrones Hill, Cano Verde Ranch is present. No information about this ranch is available.

Information regarding the use of the nearby Creek and Bucana River surface waters was not available at the time of this investigation. The nearby creek is approximately 1/2 mile north, and Bucana River is approximately 2 miles due west of the facility. The Caribbean Sea is approximately 3 miles due south.



According to facility representatives, there are no domestic wells in the immediate vicinity of the site. The surrounding neighborhoods and businesses receive potable water from the City of Ponce which comes from Lake Toa Voca, approximately 14 miles away.

#### 1.3.6 Release Pathways

##### Soil/Groundwater

The Checkpoint Systems facility is underlain by alluvial unconsolidated deposits which are known to extend to 30 feet below ground surface (7). No information regarding stratigraphic units below this depth are available. However, a limestone bedrock unit outcrops north of the facility ( 400 meters) and is inferred to be present below the site. This limestone bedrock unit is presumed to act as an aquiclude to the shallower aquifer (7).

The facility is underlain by a saturated coarse sand and gravel unit of varying thickness confined above and below by a dense silty clay and dense clay units, respectively. The thickness of the coarse sand and gravel unit, the shallow aquifer, varies between 5.5 and 14 feet



in thickness. The transmissibility of the shallow alluvial aquifer near the facility area has been reported to be close to 70,000 gallons per day per foot. No information regarding the overall hydraulic gradient was available at the time of this report (7). In addition, no groundwater elevation information at the three shallow wells existing at the site was available.

The dense clay mixed with silt and sand would possibly retard the flow of released hazardous constituents attempting to infiltrate into the shallow groundwater aquifer below it. However, the upper caliche fill, where present, would allow the released hazardous constituents to infiltrate and move laterally more easily than the dense clay underneath it.

#### Waste Spill

On May 9, 1983, an overflow spill from the facilities waste storage lagoons existing at that time occurred due to heavy rains. The wastewater solution containing ferric chloride, aluminum chloride, and hydrochloric acid overflowed to a nearby off-site area where it remained in puddles. Clean-up operations involved liquid removal



using portable pumping equipment. The soil was neutralized with soda ash, and subsequently excavated and dumped inside the lagoon (6).

#### Surface Water

There are no surface waters immediately adjacent to or on the facility property, and hence the potential for release to surface water is low.

#### Air

The potential for emissions of organic vapors and particulate dust are negligible since the waste previously stored in the lagoons was completely inorganic in nature. However, inorganic vapors of chlorine and hydrochloric acid would likely have been released during evaporation operations. In June of 1983, an adjacent facility filed suit alleging that vapor from the impoundments was corroding plant equipment. This claim was not verified and the case was settled when Checkpoint Systems removed its surface impoundments from service.



Presently, all wastewaters are stored in closed, above ground tanks, and the potential for release into the air is minimal.

#### Subsurface Gas

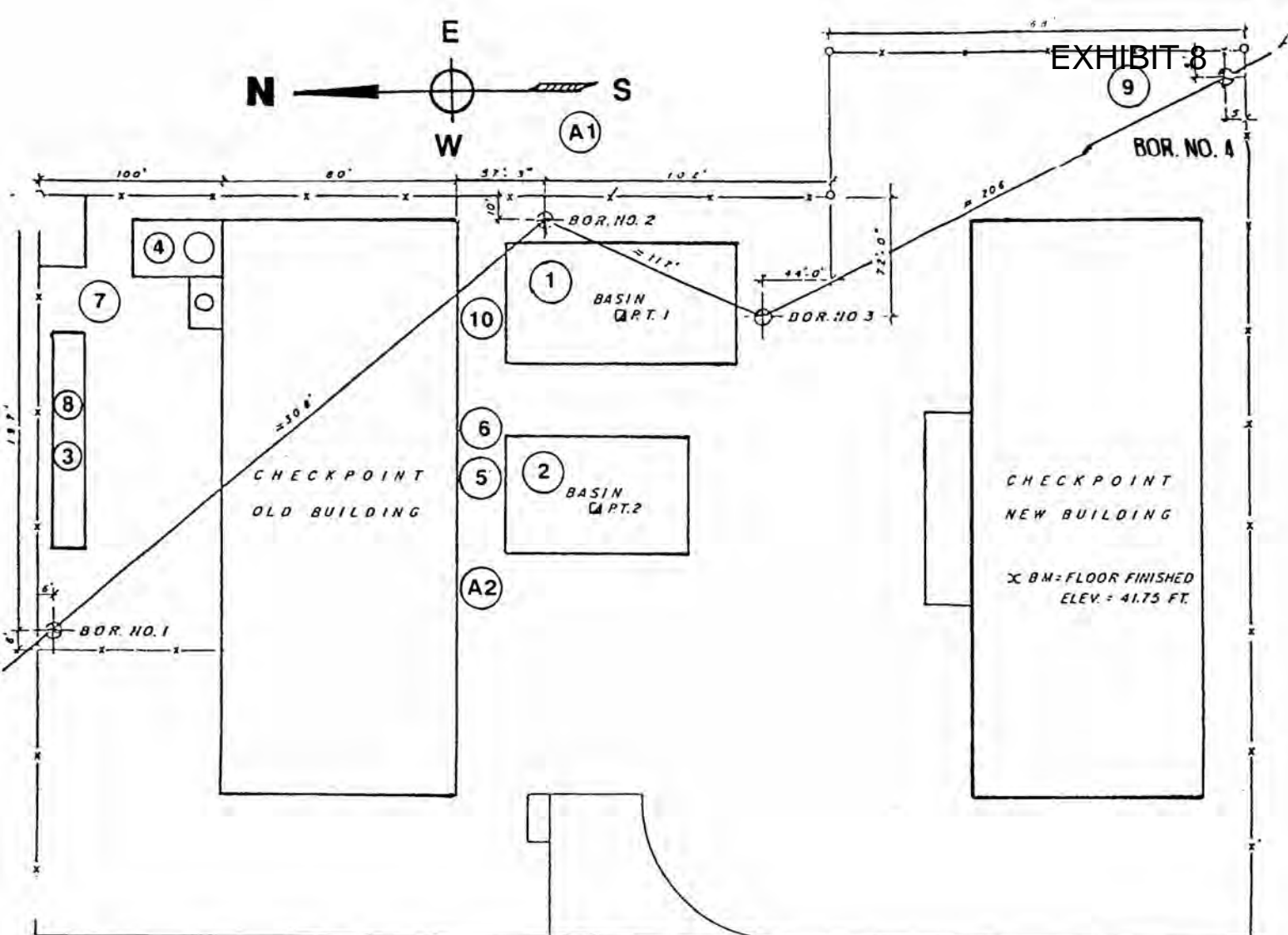
The potential for subsurface gas migration is negligible since the wastewater is inorganic in nature and presently stored in closed above ground tanks. In the past, the surface impoundments where the wastewaters were stored had liners which would prevent the generation of subsurface gas.

#### 1.4 Solid Waste Management Units

The PR and VSI resulted in the identification of ten solid waste management units (SWMU's) at the Checkpoint Systems facility. The locations of all SWMU's and AOC's are shown on Figure 1-4-1. Table 1-4-1 presents a list of all identified SWMUs.

A more detailed description of each of these units follows the table and includes the unit description, dates of operation, wastes managed, release controls, history of releases, conclusions regarding potential for release, and suggested further actions.





Q-PERCOLATION TESTS

FIGURE 1-4-1

# CHECKPOINT SYSTEMS OF PUERTO RICO Solid Waste Management Units (SWMUs) and Areas Of Concern (AOC)

## LEGEND

- |                            |                                       |
|----------------------------|---------------------------------------|
| 1) LAGOON A                | 9) DUMPSTER STORAGE AREA              |
| 2) LAGOON B                | 10) SCRUBBER WATER TANK DRAINAGE AREA |
| 3) LAGOON C                |                                       |
| 4) STORAGE TANKS A & B     |                                       |
| 5) SCRUBBER WATER TANK     |                                       |
| 6) SCRUBBER UNIT           |                                       |
| 7) TANKER TRUCK            |                                       |
| 8) EMPTY DRUM STORAGE AREA |                                       |

## AOC NO.

- A1) OVERFLOW SPILL AREA
- A2) RAW ACID STORAGE AREA



Figure 1-4-1



TABLE 1-4-1  
IDENTIFIED SWMU'S  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO

SWMU	Type	Dates of Operation	Waste Managed	Release Controls
1. Lagoon A (RCRA regulated)	Surface Impoundment	1979-1983/ 1984	Spent etching solution (D002)	30 mil liner, 5 foot berm
2. Lagoon B (RCRA regulated)	Surface Impoundment	1980-1983/ 1984	Spent etching solution (D002)	30 mil liner, 5 foot berm
3. Lagoon C	Surface Impoundment	1983-1983	Spent etching solution (D002)	30 mil liner, 2 foot berm
4. Storage Tanks A & B	Above ground storage tanks	1983 to present	Spent etching solution (D002)	Concrete pad with epoxy coating, 3.5 to 4.0' high concrete containment walls
5. Scrubber Water Tank	Above ground reinforced fiberglass tank, open top	(1979?) to present	Wastewater from scrubber and process trenches	None
6. Scrubber Unit	Above ground	(1979?) to present	Acid fumes	Transfers condensate to Scrubber Water Tanks
7. Tanker Truck	Truck Vehicle	1984 to present	Spent etching solution (D002)	Rubber lined tank
8. Empty Drum Storage Area	Ground Surface	(1979?) to present	Empty acid drums	Sitting on wooden pallets



TABLE 1-4-1  
(Continued)

SWMU	Type	Dates of Operation	Waste Mangaged	Release Controls
9. Dumpster with Aluminum Shavings		(1979?) to present	Aluminum shavings (not containing hazardous constituents)	None. (Aluminum shavings had spilled on-to the surrounding soil)
10. Scrubber Water Tank Drainage Area	Swale	(1979?) to present	Scrubber water	Soil, ground-water



Unit Number: SWMUs 1 and 2

Unit Name: Lagoons A and B (Photo 1)

Unit Description: Lagoon A is an inactive, closed surface impoundment which had an approximate capacity of 200,000 gallons. The unit dimensions were approximately 80 ft. wide by 120 ft. long at surface and 10 to 12 feet deep. Bottom dimensions were approximately 20 feet by 60 feet. Side slopes of 1 to 1 were present. The impoundment was lined with a total 36 mils-thick chlorinated polyethylene fabric liner. A 6-mil liner sandwiched between two 15-mil liners made up the liners total thickness. The liner fabric was reported as having 10 threads per inch in each direction and having a thread weight of 1000 deniers (1).

Lagoon B is an inactive, closed surface impoundment with an approximate capacity of 83,200 gallons. The unit dimensions were approximately 60 feet by 40 feet at surface and 30 feet by 20 feet at the bottom. Side slopes, liner material and thickness was identical to Lagoon A (11).

Wastewater from etching operations was discharged directly into the lagoons via a piping system. Wastewater in the lagoon was periodically pumped into vacuum trucks for shipment to an off-site TSD.

On November 12, 1987, EPA accepted EQB's determination that the units had been clean closed; however, EPA has not terminated their Interim Status. This will be decided when corrective action is finalized (9).

Date of Start-up: These units began operation in 1979 (1).



Date of Closure: These units were closed in February 1984, without an approved closure plan (1).

Wastes Managed: Wastewaters from the facility's etching processes were stored in these lagoons. The wastewater consisted of Ferric chloride, aluminum chloride, hydrochloric acid, and water (1).

Release Controls: These units were equipped with a five-foot earthen dike. The unit and dike were lined with a synthetic liner (1).

History of Releases: An overflow spill from these units into an adjacent off-site area occurred on May 9, 1983 (6).

Conclusions: The potential for past release of hazardous constituents to soil and groundwater is low since these units were lined and soil sampling conducted during closure indicated no contamination.

Since these units were not located near surface water bodies, the potential for past and continuing release of hazardous constituents to surface water is low.

The potential for subsurface gas generation is low since these units contained mainly inorganic wastes, and the units were equipped with bottom liners.

The potential for release of hazardous constituents to air is low since these units have been closed.

Suggested Further Action: Continued Groundwater sampling of the existing monitoring wells is suggested until a determination is made by EPA concerning the status of the units.



Unit Number: SWMU 3

Unit Name: Lagoon C (Photo 17)

Unit Description: This inactive unit was an experimental evaporation lagoon (surface impoundment) with an approximate capacity of 5000 gallons. The unit dimensions were reported by facility representatives to be approximately 200 feet by 20 feet and 1 inch deep. The lagoon was in service approximately one week, and was reported to be lined similarly to Lagoons A and B (SWMUs 1 and 2) (1).

Date of Start-up: This unit was put into operation in 1983 (1).

Date of Closure: This unit was taken out of service in 1983 (lagoon was in service for approximately 7 days) (1).

Wastes Managed: This unit received spent etching solution (D002) (1).

Release Controls: This unit was lined with a synthetic liner and, according to facility representatives, a free-board was maintained (1).

History of Releases: There have been no documented releases from this unit.

Conclusions: The potential for past release of hazardous constituents to soil and groundwater is unknown since soil sampling verification was never performed.

Since this unit was not located near surface water bodies, the potential for past release of hazardous constituents to surface water is low.



The potential for subsurface gas generation is low since this unit contained mainly inorganic wastes, and was lined with fabric.

The potential for release of hazardous constituents to air is low since the unit has been closed.

Suggested Further Action: Soil sampling beneath the reported depth of this unit (one foot) is suggested to determine the impacts of potential release into soil. Additionally, groundwater sampling of the existing monitoring wells is suggested to document any impacts of past potential releases into groundwater.



Unit Number: SWMU 4

Unit Name: Storage Tanks A and B (Photos 19 and 20)

Unit Description: These units consist of two 12,000 gallon above ground fiberglass storage tanks. One tank stores wastes to be recycled back to the facility process, and the other stores waste for less than 90 days before off-site disposal (1).

Date of Start-up: These units began operation in October 1983 (1).

Date of Closure: These units are still in operation (11).

Wastes Managed: Wastes managed by these units include etching and spent etching solution from the facility's process containing ferric chloride, aluminum chloride, hydrochloric acid, and water (D002) (1).

Release Controls: Release controls for these units include a concrete tank pad with epoxy coating and 3.5 to 4.0 high by 6 to 8-inch thick concrete containment walls. Releases onto the tank pad and containment area drain to two sumps. Liquid is pumped from the sumps back into the storage tanks (1).

History of Releases: Releases have occurred and have been contained by the system. At the time of the VSI, there was no standing liquid noticed in the containment area (11).

Conclusions: The potential for past and continuing release of hazardous constituents to soil and groundwater is low since the tanks are closed-top and are located aboveground, and a containment system exists.



Since this unit was not located near surface water bodies, the potential for past release of hazardous constituents to surface water is low.

The potential for subsurface gas generation and air releases is low since the tanks are closed-top and are located aboveground.

Suggested Further Action: No further actions are suggested for these units.



Unit Number: SWMU 5

Unit Name: Scrubber Water Tank (Photos 7, 8 and 9)

Unit Description: This unit consists of a fiberglass reinforced with steel above ground open top tank with an approximate capacity of 500 gallons. The unit dimensions are approximately 4 feet high and 5 feet in diameter. This SWMU is located adjacent to the scrubber unit and sits flat on the ground surface (1).

Date of Start-up: The date of start-up for this unit is unknown.

Date of Closure: This unit is still in operation.

Wastes Managed: Wastes managed by this unit include condensate from scrubber unit and wastewater from process trenches for recycle. Wastewater contains ferric chloride, aluminum chloride, hydrochloric acid, and water (1).

Release Controls: There are no release controls associated with this unit (11).

History of Releases: At the time of the VSI, there was staining noted on the surrounding soil.

Conclusions: Since staining was observed, possibly the result of spillage, the potential for past and continuing release of hazardous constituents to soil is high. The potential for past and continuing release of hazardous constituents to groundwater is moderate given the caliche fill present in the area.

Since this unit is not located near surface water bodies, the potential for past and continuing release of hazardous constituents to surface water is low.



The potential for subsurface gas generation and air release is low since this unit is above ground and contains mainly inorganic wastes.

Suggested Further Action: Since there is a high potential for past and continuing release of hazardous constituents to soil and a moderate potential for release of hazardous constituents to ground water, soil sampling is suggested to determine if there has been a release.



Unit Number: SWMU 6

Unit Name: Scrubber Unit (Photos 2, 6, 7, 8, 10)

Unit Description: This unit condenses the acid vapors released by the facility operations. It is above ground and it transfers the acidic condensate to the scrubber water tank (1).

Date of Start-up: The date of start-up for this unit is unknown.

Date of Closure: This unit is still in operation.

Wastes Managed: Wastes managed by this unit include acid fumes and vapors from the etching process of the facility operations (1).

Release Controls: There are no associated release controls for this unit. However, condensate water is drained to the Scrubber Water Tank (SWMU 5) (11).

History of Releases: There have been no documented releases from this unit.

Conclusions: The potential for past and continuing release of hazardous constituents to soil, groundwater, surface water, or air and the potential for subsurface gas generation is low since it is an enclosed above ground unit which treats acid fumes and vapors.

Suggested Further Action: No further actions are suggested for this unit at this time.



Unit Number: SWMU 7

Unit Name: Tanker Truck (Photo 22)

Unit Description: This unit consists of a tank truck with plastic lined interior with a capacity of 5,000 gallons. It is stored empty or with minor residues at the site when it is not in operation. The truck is used to haul spent etching solution (D002) off site for disposal/reuse (1).

Date of Start-up: This unit began operation in 1987.

Date of Closure: This unit is still in operation.

Wastes Managed: The spent etching solution mainly contains ferric chloride, aluminum chloride, hydrochloric acid and water (D002) (1).

Release Controls: This unit is equipped with an interior plastic liner (1).

History of Releases: There have been no documented releases from this unit.

Conclusions: The potential for past and continuing release of hazardous constituents to soil and groundwater is low, since the tanker truck is stored empty while not in operation.

The potential for subsurface gas generation and release of hazardous constituents to air is low, since the unit is an above ground closed-topped container.

Suggested Further Action: No actions are deemed necessary at this unit.



Unit Number: SWMU 8

Unit Name: Empty Drum Storage Area  
(Photos 16, 17 and 18)

Unit Description: This unit consists of empty 55 gallon drums sitting on wooden pallets. This SWMU is located in the old location of Lagoon C (SWMU 3) and covers an approximate area of 250 sq. ft. (1).

Date of Start-up: The start-up date for the unit is unknown; however, it is believed to have started in 1979.

Date of Closure: This unit is still in operation.

Wastes Managed: The empty drums used to contain raw hydrochloric acid used in the facility processes (1).

Release Controls: No release controls were identified during the VSI.

History of Releases: At the time of the VSI, there was staining on the surrounding soil.

Conclusions: Since staining was observed, possibly the result of spillage, the potential for release of hazardous constituents to soil is high. The potential for past and continuing release of hazardous constituents to groundwater is moderate.

Since this unit is not located near surface water bodies, the potential for past and continuing release of hazardous constituents is low.

The potential for subsurface gas generation and air releases is low since this unit is above ground and contains only in organic wastes.



Suggested Further Action: Since there is a high potential for release of hazardous constituents to soil and a moderate potential for release groundwater, soil sampling is suggested to determine if there has been a release.



Unit Number: SWMU 9

Unit Name: Dumpster with Aluminum Shavings (Photo 5)

Unit Description: This unit is a metal dumpster located behind the main facility building. It is used to store aluminum (shavings) and paper scraps (11).

Date of Start-up: The date of start-up for this unit is unknown (11).

Date of Closure: This unit is still in operation.

Wastes Managed: The wastes managed at this unit include aluminum and paper which may contain organics associated with adhesive glue application (tricholoroethane) (11).

Release Controls: There are no release controls associated with this unit (11).

History of Releases: At the time of the VSI, numerous aluminum shavings were present surrounding the metal dumpster.

Conclusions: The potential for release of hazardous constituents to soil and groundwater is moderate since the aluminum and paper may be coated with organics associated with adhesive application.

Since this unit is not located near surface water bodies, the potential for past and continuing release of hazardous constituents to surface water is low.

Since the organics associated with adhesive application are volatile, the potential for release of hazardous constituents to air is moderate.



Since this unit is aboveground and open-topped, the potential for subsurface gas generation is low.

Suggested Further Action: Soil sampling is suggested to determine if hazardous constituents have been released from this unit.



Unit Number: SWMU 10

Unit Name: Scrubber Water Tank Drainage Area  
(Photos 8, 11 and 12)

Unit Description: This unit is a 2-foot wide swale discharging to an area outside the facility. It is an area of approximately 400 square feet. This SWMU is located in the scrubber unit area along with the scrubber water tank and is near the raw acid storage area (11).

Date of Start-up: The date of start-up for this unit is unknown (11).

Date of Closure: This unit is still in operation (11).

Wastes Managed: This unit may receive scrubber water or spills from the raw acid storage area (11).

Release Controls: There are no release controls associated with this unit (11).

History of Releases: At the time of the VSI, there was staining on the surrounding soil.

Conclusions: Since staining was observed, possibly the result of spillage, the potential for release of hazardous constituents to soil is high. The potential for past and continuing release of hazardous constituents to groundwater is low.

Since this unit is not located near surface water bodies, the potential for past and continuing release of hazardous constituents to surface water is low.

The potential for subsurface gas generation and air releases is low since this unit contains only inorganic wastes.



Suggested Further Action: Since there is a high potential for release of hazardous constituents to soil, sampling is suggested to determine if there has been a release.



## 1.5 Areas of Concern

This section of the PR/VSI report discusses two areas of concern that were observed during the VSI. Table 1-4-2 shows a list of the Areas of Concern identified at the site.

### 1.5.1 Raw Acid Storage Area (Photos 6 and 10)

This unit is a ground level area adjacent to the scrubber water tank drainage area (SWMU No. 10). It is used for the storage of 55-gallon drums containing raw hydrochloric acid used in the facility processes. The drums are sitting on wooden pallets on top of what appeared to be caliche fill soil. During the VSI, evidence of spillage and corrosion in one drum was observed. Additionally, standing liquid was present in the area. Soil sampling is suggested to determine if a release of hazardous constituents has occurred.

### 1.5.2 Overflow Spill Area (Photo 4)

This unit is a ground level area outside the facility which received an overflow from Lagoons A and B. The reported spill occurred in May 9, 1983. Remediation involved neutralizing the soil with soda ash after the standing liquid was pumped (removed) from the area. Near surface soils were



TABLE 1-4-2

AREAS OF CONCERN  
CHECKPOINT SYSTEM SYSTEMS PUERTO RICO, INC.  
PONCE, PUERTO RICO

<u>Area</u>	<u>Type</u>	<u>Dates of Operation</u>	<u>Potentially Affected Media</u>
1. Overflow Spill Area	Ground surface	Unknown	Soil, Groundwater
2. Raw Acid Storage Area	Caliche present	Unknown	Soil, Groundwater



reportedly excavated and dumped inside the lagoons for offsite disposal. The spilled liquid contained ferric chloride, aluminum chloride, hydrochloric acid, and water. Soil sampling is suggested to determine if a release of hazardous constituents has occurred.



## 1.6 Summary of Conclusions and Suggested Further Actions

Several of the SWMUs and AOCs identified during the PR/VSI have potential for, or there is evidence of, releases to the environment. Additional sampling of these units and/or areas of concern should be conducted to ascertain if releases have occurred. Further information gathered as a result of sampling should be used as the basis for determining if more extensive site investigations are necessary.



## 1.7 References

1. Preliminary Assessment, Solid Waste Management Units at Checkpoint Systems of Puerto Rico, Inc., January 28, 1986.
2. Hazardous Waste Permit Application for Checkpoint System of Puerto Rico, Inc.; March 18, 1982.
3. Site Visit Report, EPA I.D. No. PR0091126037; 1986.
4. EPA Summary Site Visit Report Letter; August 3, 1982.
5. EPA Interoffice Memorandum; June 3, 1982. Re: Full RCRA Generator Inspection.
6. Letter to EPA Permit Branch from Puerto Rico EQB; Re: Incident Report by Checkpoint Systems of Puerto Rico of May 27, 1983; October 19, 1983.
7. Groundwater Monitoring Wells Installation and Hydrogeologic Evaluation Report, Checkpoint Plant Site, Ponce Puerto Rico; February 15, 1985.
8. Letter to Checkpoint Systems Inc. from EPA; Re: March 22, 1985.
9. Letter to EQB from EPA; Re: Closure Certification; November 12, 1987.
10. Certified Mail Letter to Mr. Gustavo Rodriguez, representing Checkpoint Systems, Inc; Re: Consent Agreement and Consent Order; November 4, 1986.
11. VSI conducted by HLA on November 15, 1988.



## 1.8 Visual Site Inspection

The following sections contain supporting documentation for the VSI including a VSI Summary (1.8.1), VSI Field Notes (1.8.2) and and the VSI Photograph Log (1.8.3).

### 1.8.1 Visual Site Inspection Summary

A Visual Site Inspection (VSI) was conducted at the Checkpoint Systems facility on November 17, 1988 by the A. T. Kearney Team. Observations made during the VSI are included within the main body of this document along with conclusions and suggested further actions for each unit identified.

The following individuals participated in the VSI:

Elani Gray	Harding Lawson Associates
Hector Lopez	Harding Lawson Associates
Luis Aguilera	Checkpoint Systems

The inspection began at approximately 10:00 a.m. with an introductory meeting to explain the purpose of the VSI. Approximately two hours were spent discussing facility operations and individual solid waste management units (SWMUs) identified as a result of the preliminary review. A site



inspection was then conducted which lasted approximately two hours. Photographs were taken with a 35 mm Cannon Sure-Shot automatic camera. The VSI was completed at approximately 2:00 p.m.



**1.8.2 VISUAL SITE INSPECTION FIELD NOTES**



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

SWMUS 3 + 4

A. GENERAL:

UNIT TYPE: Storage Tanks A+B

DATE OF START-UP: 1983

DATE OF CLOSURE: still in operation

CLOSURE INFORMATION: \_\_\_\_\_

CAPACITY: 12,000 gallons each

VOLUME: 20' high x 8' diameter

WASTE TYPE: FeCO<sub>3</sub> + AlCl<sub>3</sub> solution, muriatic acid; pH = 1

HAZARDOUS CONSTITUENTS: \_\_\_\_\_

REGULATORY STATUS: \_\_\_\_\_

SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_

B. UNIT DESCRIPTION: closed, aboveground, fiberglass

Both are recycle tanks - one pumps to system, one receives from system

C. MONITORING DESCRIPTION: \_\_\_\_\_

D. RELEASE CONTROLS: concrete pad (10" thick); 3½-4' concrete walls (6-8" thick)  
sproy coated - containment sloped to 2 sumps which  
also receive runoff + rainwater from acid storage tanks containment

E. EVIDENCE OF PAST/CURRENT RELEASES: Releases haven't occurred + have  
been contained by system - spills + rainwater are  
directed back to tanks for reuse

F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_

G. REFERENCES: \_\_\_\_\_



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
 UNIT TYPE: Lagoon C  
 DATE OF START-UP: 1983  
 DATE OF CLOSURE: 1983  
 CLOSURE INFORMATION: emptied contents; rolled up liner; collected soil samples - closed as impoundments A+B at same time - no approved closure plan  
 CAPACITY: 5000 gallons  
 VOLUME: 20' x 20' x 1 foot deep  
 WASTE TYPE: HCl<sub>2</sub> + FeCl<sub>3</sub> solution  
 HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
 REGULATORY STATUS: RCRA  
 SUBPART F GROUNDWATER MONITORING: as Ponds A+B
- B. UNIT DESCRIPTION: experimental evaporation pond; in service less than one week; lined w/ 30 mil synthetic liner; freeboard reported maintained by facility
- C. MONITORING DESCRIPTION: covered by Pond system - one well in lagoon C
- D. RELEASE CONTROLS: liner, freeboard
- E. EVIDENCE OF PAST/CURRENT RELEASES: none
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_



RO # \_\_\_\_\_  
JOB NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PREPARED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

SWMU 2

- A. GENERAL:  
UNIT TYPE: Lagoon B  
DATE OF START-UP: 1980  
DATE OF CLOSURE: 1983/84  
CLOSURE INFORMATION: closed as A at same time  
  
CAPACITY: 83,200 gallons  
VOLUME: 40' x 60' x 8-10' deep  
WASTE TYPE: AlCl<sub>3</sub> + FeCl<sub>3</sub> solution  
HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
REGULATORY STATUS: RCRA  
SUBPART F GROUNDWATER MONITORING: 4 wells; 1 up/3 down
- B. UNIT DESCRIPTION: same as A - SWMU 1
- C. MONITORING DESCRIPTION: see A
- D. RELEASE CONTROLS: see A
- E. EVIDENCE OF PAST/CURRENT RELEASES: stone knox
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_



RO # \_\_\_\_\_  
JOB NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PREPARED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

SWMU 1

- A. GENERAL:  
UNIT TYPE: Lagoon A - pre RCRA  
DATE OF START-UP: 1979  
DATE OF CLOSURE: 1983/84  
CLOSURE INFORMATION: closed under RCRA - emptied contents, rolled up liner, soil tested, no contamination, backfilled without prior agency approval  
CAPACITY: 200,000 gallons  
VOLUME: 80 x 120' x 8-10' deep  
WASTE TYPE: AlCl<sub>3</sub> + FeCl<sub>3</sub> solution  
HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
REGULATORY STATUS: RCRA  
SUBPART F GROUNDWATER MONITORING: 4 wells; 3 (up/1 down) - not believed to be up to 40 CFR requirements
- B. UNIT DESCRIPTION: earthen impoundment, now closed and used as parking lot. Received spent etching solution lined w/ 30 mil reinforced synthetic liner  
incline = 45°
- C. MONITORING DESCRIPTION: 4 wells; repeatedly 3 down/1 up gradient ~30 feet deep / screw caps - 2" wells
- D. RELEASE CONTROLS: formerly had <sup>5' tall</sup> earthen dikes covered by liner. In photos from 1983, 2' freeboard appeared maintained
- E. EVIDENCE OF PAST/CURRENT RELEASES: 1983 heavy rains from two big storms caused overflow from north 2' (to the 1) spill reported to CAR
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
 UNIT TYPE: Scrubber  
 DATE OF START-UP: ?  
 DATE OF CLOSURE: still in operation  
 CLOSURE INFORMATION: \_\_\_\_\_  
 \_\_\_\_\_  
 CAPACITY: \_\_\_\_\_  
 VOLUME: \_\_\_\_\_  
 WASTE TYPE: acid fumes/water  
 HAZARDOUS CONSTITUENTS: -  
 REGULATORY STATUS: -  
 SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: "scrubs" acid fumes off <sup>etching</sup> process indoor tanks  
water from scrubber dumps into scrubber water tank for  
recycle.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- C. MONITORING DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- D. RELEASE CONTROLS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- E. EVIDENCE OF PAST/CURRENT RELEASES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
 UNIT TYPE: Scrubber Water Tank  
 DATE OF START-UP: ?  
 DATE OF CLOSURE: still in operation  
 CLOSURE INFORMATION: —
- CAPACITY: 500 gallons  
 VOLUME: 5' diameter x 4' high  
 WASTE TYPE: water from scrubber + process trenches  
 HAZARDOUS CONSTITUENTS: acid  
 REGULATORY STATUS: none  
 SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: fiberglass (reinforced w/ steel); open top  
receives wastewater from scrubber + process trenches for  
recycle - sits on soil
- C. MONITORING DESCRIPTION: —
- D. RELEASE CONTROLS: none
- E. EVIDENCE OF PAST/CURRENT RELEASES: spills evident around tank
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_





RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
 UNIT TYPE: Rubber lined trailer (tanker)  
 DATE OF START-UP: bought in 1987  
 DATE OF CLOSURE: \_\_\_\_\_  
 CLOSURE INFORMATION: \_\_\_\_\_  
 \_\_\_\_\_  
 CAPACITY: 5000 gal  
 VOLUME: \_\_\_\_\_  
 WASTE TYPE:  $AlCl_3 / FeCl_3$  solution - spent  
 HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
 REGULATORY STATUS: \_\_\_\_\_  
 SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: portable - always in transit  
 \_\_\_\_\_  
receives 10,000 gal per month  $FeCl_3$   
shipping 2 - 10,000 gal per month  $FeCl_3$   
 \_\_\_\_\_  
 \_\_\_\_\_
- C. MONITORING DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- D. RELEASE CONTROLS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- E. EVIDENCE OF PAST/CURRENT RELEASES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

A. GENERAL:

UNIT TYPE: AOC 2 Acid Storage Area  
 DATE OF START-UP: ?  
 DATE OF CLOSURE: still in operation  
 CLOSURE INFORMATION: —

CAPACITY: 30-55-gallon drums currently stored

VOLUME: \_\_\_\_\_

WASTE TYPE: non-waste

HAZARDOUS CONSTITUENTS: —

REGULATORY STATUS: —

SUBPART F GROUNDWATER MONITORING: —

B. UNIT DESCRIPTION: Spills around drums, stored outside  
on wooden pallets; surrounding soil covered w/  
rocks/gravel

C. MONITORING DESCRIPTION: —

D. RELEASE CONTROLS: none - drums capped closed - one metal  
drum was corroding

E. EVIDENCE OF PAST/CURRENT RELEASES: standing  
spills of liquid noted in  
area

F. ADDITIONAL INFORMATION NEEDED: —

G. REFERENCES: —



RO # \_\_\_\_\_  
JOB NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PREPARED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
UNIT TYPE: Drainage Area from Scrubber Area  
DATE OF START-UP: \_\_\_\_\_  
DATE OF CLOSURE: \_\_\_\_\_  
CLOSURE INFORMATION: \_\_\_\_\_  
\_\_\_\_\_  
CAPACITY: \_\_\_\_\_  
VOLUME: \_\_\_\_\_  
WASTE TYPE: \_\_\_\_\_  
HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
REGULATORY STATUS: \_\_\_\_\_  
SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: receives drainage from scrubber tank area  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- C. MONITORING DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- D. RELEASE CONTROLS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- E. EVIDENCE OF PAST/CURRENT RELEASES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_  
\_\_\_\_\_



RO # \_\_\_\_\_  
JOB NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PREPARED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
UNIT TYPE: Aluminum Storage Dumpster  
DATE OF START-UP: ?  
DATE OF CLOSURE: —  
CLOSURE INFORMATION: —  
  
CAPACITY: 5 yd<sup>3</sup>  
VOLUME: \_\_\_\_\_  
WASTE TYPE: aluminum  
HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
REGULATORY STATUS: \_\_\_\_\_  
SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: metal ~ 5 yd<sup>3</sup> - open top dumpster  
located on S.E. corner of property  
holds aluminum for recycle
- C. MONITORING DESCRIPTION: —
- D. RELEASE CONTROLS: none
- E. EVIDENCE OF PAST/CURRENT RELEASES: aluminum shavings on  
ground in area
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_



RO # \_\_\_\_\_  
JOB NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PREPARED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
UNIT TYPE: AOB 3 Empty acid Drum Storage Area  
DATE OF START-UP: \_\_\_\_\_  
DATE OF CLOSURE: \_\_\_\_\_  
CLOSURE INFORMATION: \_\_\_\_\_  
\_\_\_\_\_  
CAPACITY: approx 30-55 gal drums stored  
VOLUME: \_\_\_\_\_  
WASTE TYPE: \_\_\_\_\_  
HAZARDOUS CONSTITUENTS: mineralic acid residues  
REGULATORY STATUS: \_\_\_\_\_  
SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: area approx 5' x 50' for storage of  
empty 55 gal drums on wooden pallets -  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- C. MONITORING DESCRIPTION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- D. RELEASE CONTROLS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- E. EVIDENCE OF PAST/CURRENT RELEASES: spills noted for ground  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



RO # \_\_\_\_\_  
 JOB NO. \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

SPECIFIC UNIT INFORMATION (ONE FOR EACH UNIT)

- A. GENERAL:  
 UNIT TYPE: AOC 1 Per Spill Overflow Area  
 DATE OF START-UP: Spill: 1983 May 9,  
 DATE OF CLOSURE: \_\_\_\_\_  
 CLOSURE INFORMATION: never sampled; neutralized w/ soda ash  
 \_\_\_\_\_  
 CAPACITY: \_\_\_\_\_  
 VOLUME: \_\_\_\_\_  
 WASTE TYPE: FeCl<sub>3</sub> + AlCl<sub>3</sub>  
 HAZARDOUS CONSTITUENTS: \_\_\_\_\_  
 REGULATORY STATUS: \_\_\_\_\_  
 SUBPART F GROUNDWATER MONITORING: \_\_\_\_\_
- B. UNIT DESCRIPTION: 1983. Pond A overflowed due to heavy  
rains - lost between 500 and 1200 gallons. Went off  
property. Notified EGB. Heavy rains believed to have  
diluted FeCl<sub>3</sub> solution  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- C. MONITORING DESCRIPTION: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- D. RELEASE CONTROLS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- E. EVIDENCE OF PAST/CURRENT RELEASES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- F. ADDITIONAL INFORMATION NEEDED: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- G. REFERENCES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## 2.0 SAMPLING ACTIVITIES

### 2.1 Introduction

A sampling visit (SV) was conducted by the A. T. Kearney Team (ATK) at the Checkpoint Systems of Puerto Rico facility in Ponce, Puerto Rico, on March 15, 1989. The purpose of the SV was to collect samples from areas of suspected or known release in accordance with the approved sampling plan to determine the need for further actions at the facility. The SV is not intended to represent a detailed characterization of contamination at the facility. Slight deviations from the original sampling plan were necessary in order to accommodate field conditions encountered during the SV. All deviations were approved by the Field QC Officer. All deviations are discussed in detail in this section of the report.

The ATK sampling team was comprised of representatives from Harding Lawson Associates (HLA) and K. W. Brown & Associates, Inc. (KWBA), and included:

<u>Name</u>	<u>Company</u>	<u>Responsibility</u>
Elani Gray	HLA	Field Team Leader/ Safety Officer
Kathy Farr	HLA	Sampling Technician
Hector Lopez	HLA	Sampling Technician



<u>Name</u>	<u>Company</u>	<u>Responsibility</u>
David Perez	HLA	Sampling Technician
Doug Ucci	HLA	Sampling Technician
K. C. Donnelly	KWBA	Field QC Officer

## 2.2 Site Conditions

During the SV, the daily high temperature was approximately 98° F, with partly cloudy skies. Southeast winds ranged from 4 to 10 miles per hour. The ground at the facility was dry and hard.

The soil at the Checkpoint facility is not naturally occurring. According to facility representatives, the entire 2 acre site was filled with calcareous silt, clay and limestone gravel material prior to construction of the current facilities.

The site consists of two buildings (designated the "Old" and "New" Buildings by the facility) separated by a gravel parking area where two Lagoons (A and B) formerly existed. To the north of the Old Building is an area which was temporarily used for evaporation of wastewater (Former Lagoon C), which is currently used as a drum storage area (Empty Drum Storage Area). Most of the site was covered with ballast rocks, making surface soil sampling extremely difficult.



In general, all sampling locations at the facility were accessible. However, of the four monitoring wells, MW-4 was completely dry and could not be purged. Monitoring Well MW-3 had insufficient recharge, after being purged dry, and all aliquots of the sample could not be obtained. Monitoring Wells MW-1 and MW-2 were purged (3 well casing volumes), allowed to recharge, and sampled, as planned.

### 2.3 Summary of Sampling Visit

At 1345 hours, prior to the SV, the sampling team met with facility representatives, Hector Dominguez and Bill Gerardino, to explain the objectives of the SV. Mr. Dominguez stated at this time that the facility wished to receive split samples and would provide containers for these samples. All soil and groundwater samples were collected at this facility between 1345 and 1930 hours on March 15, 1989.

Groundwater samples were collected from monitoring wells installed by the facility in 1985. The wells were installed as a result of the operation and subsequent closure of two lined surface impoundments. Three groundwater samples and eleven surface soil samples were collected, including two



background samples. The pH readings for all surface soil samples prescribed in the approved sampling plan were not collected due to the malfunction of the pH meter.

Locations of all samples collected are shown in Figure 2-1. Table 2-1 lists all samples collected, describes sampling methods used and deviations from the sampling plan. Also, Table 2-1 includes notes regarding specific details concerning each sample collected. Table 2-2 lists the analyses requested for each sample. The individual analyses to be performed within each parameter grouping are those specified in the EPA/Contract Laboratory Program (CLP) statement of work (July, 1987 for inorganics and October, 1986, with revisions, for organics).







TABLE 2-1  
 SAMPLE IDENTIFICATION AND DEVIATIONS FROM SAMPLING PLAN  
 CHECKPOINT SYSTEMS OF PUERTO RICO  
 PONCE, PUERTO RICO

SAMPLING LOCATION	SAMPLE TYPE	SAMPLE NUMBER	PLANNED		ACTUAL*		SAMPLE TIME (MILITARY)	NOTES
			SAMPLING METHOD	SAMPLING DEPTH	SAMPLING METHOD	SAMPLING DEPTH		
Equipment Blanks	Water	C001	Teflon Bailer	N/A	Teflon Bailer	N/A	1440	1
	Water	C003	Stainless Steel Knife & Bowl	N/A	Stainless Steel Knife & Bowl	N/A	1530	1
	Water	C005	Stainless Steel Scoop	N/A	Stainless Steel Scoop	N/A	1550	1
Groundwater Monitoring Well No. 1	Groundwater	C002	Dedicated Teflon Bailer	N/A	Dedicated Teflon Bailer	N/A	1510	2
Groundwater Monitoring Well No. 2	Groundwater	C004	Dedicated Teflon Bailer	N/A	Dedicated Teflon Bailer	N/A	1610	2
Groundwater Monitoring Well No. 3	Groundwater	C007	Dedicated Teflon Bailer	N/A	Dedicated Teflon Bailer	N/A	1940	2, 3
Groundwater Monitoring Well No. 4	Groundwater	N/A	Dedicated Teflon Bailer	N/A	NS	NS	-	2, 4
Drainage Area from Scrubber and Scrubber Water Tank	Surface Soil	C006	Stainless Steel Scoop	0-1'	Stainless Steel Steel Scoop	4-6"	1625	5
Drainage Area from Scrubber and Scrubber Water Tank Duplicate	Surface Soil	N/A	Stainless Steel Scoop	0-1'	NS	NS	-	5
Spill Overflow Area No. 1 (Outside Facility Boundary)	Surface Soil	C008	Stainless Steel Scoop	0-1'	Stainless Steel Steel Scoop	4-6"	1720	6
Spill Overflow Area No. 2 (Outside Facility Boundary)	Surface Soil	C009	Stainless Steel Scoop	0-1'	Stainless Steel Steel Scoop	4-6"	1740	6
Spill Overflow Area No. 3 (Outside Facility Boundary)	Surface Soil	C010	Stainless Steel Scoop	0-1'	Stainless Steel Steel Scoop	4-6"	1800	6
Empty Drum Storage Area	Surface Soil	C011	Stainless Steel Scoop	0-1'	Stainless Steel Steel Scoop	4-6"	1835	7



TABLE 2-1  
(Continued)SAMPLE IDENTIFICATION AND DEVIATIONS FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO

SAMPLING LOCATION	SAMPLE TYPE	SAMPLE NUMBER	PLANNED		ACTUAL*		SAMPLE TIME (MILITARY)	NOTES
			SAMPLING METHOD	SAMPLING DEPTH	SAMPLING METHOD	SAMPLING DEPTH		
Newly Discovered Empty Drum Storage Area	Surface Soil	C012	NP	NP	Stainless Steel Scoop	4-6"	1840	8
Former Lagoon C No. 1	Surface Soil	C013	Stainless Steel Scoop	0-1'	Stainless Steel Scoop	4-6"	1850	9
Duplicate	Surface Soil	C013D	NP	NP	Stainless Steel Scoop	4-6"	1850	9
Former Lagoon C No. 2	Surface Soil	C015	Stainless Steel Scoop	0-1'	Stainless Steel Scoop	4-6"	1900	9
Aluminum Dumpster Storage Area	Surface Soil	C017	Stainless Steel Scoop	0-1'	Stainless Steel Scoop	4-6"	1930	10
Acid Storage Area	Surface Soil	N/A	Stainless Steel Scoop	0-1'	NS	N/A	-	11
Scrubber Water Tank Area	Surface Soil	N/A	Stainless Steel Scoop	0-1'	NS	N/A	-	12
Background No. 1	Surface Soil	C014	Stainless Steel Scoop	0-1'	Stainless Steel Scoop	4-6"	1908	13
Background No. 2	Surface Soil	C016	Stainless Steel Scoop	0-1'	Stainless Steel Scoop	4-6"	1917	13
Trip Blanks	Water	NS	N/A	Grab	NS	N/A	-	14

\* See notes for description of sampling deviation

N/A - Not Applicable

N/S - Not Sampled

NP - Not Planned



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

NOTES:

1. Equipment blanks were collected by pouring distilled, deionized analyte-free water (see Attachment 2 for analyses) over each piece of decontaminated equipment, allowing the water to drain into sample containers. Each VOA blank was preserved with 3 ml concentrated HCL, and each blank sample collected for inorganics was preserved with 5 ml concentrated  $\text{HNO}_3$ .
2. Dedicated PVC bailers (one per well) were used to purge all monitoring wells. Bailers used for sample collection were bottom emptying teflon bailers (as planned), one dedicated to each well. All VOA samples were collected first and preserved with HCL, and all inorganic samples were preserved with  $\text{HNO}_3$ . All VOA and inorganic samples were preserved to a pH less than 2.0. The pH of the water samples was determined by pouring the sample water into a separate container and then measuring it with a strip of 0-12 Hydrion<sup>TM</sup> paper. The Hydrion<sup>TM</sup> paper method was



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

used, due to a malfunction in the intended pH meter in the field. The meter was not used during the sampling events. An HNu meter was used to determine photoionization readings for Monitoring wells 1, 2, and 3 which were zero, both with well caps on and off. Monitoring Well MW-4 was dry, therefore it was not purged or sampled. Field temperature and conductivity for Monitoring Wells 1, 2, and 3 are listed below. The pH for all purge and sample water was 7.0. The purge and sample water from these three wells was very turbid.

Well Number	Sample Number	Time (military)		Temperature °C		Conductivity (um/cm)*	
		Purge	Sample	Purge	Sample	Purge	Sample
1	0002	14:15	15:10	29.5	31.4	.002	.001
2	0004	15:50	16:10	26.6	26.6	.001	.002
3	0007	17:05	19:40	25.1	25.6	.002	.002

\* um/cm = micromohs/centimeter

3. Sample C007 was collected from Monitoring Well MW-3 which was purged to dryness. Recharge took 2 hours and 35 minutes, and was not sufficient to obtain all aliquots of the sample. With approval of the Field QC Officer, only the VOA and inorganic aliquots of the sample were collected.



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

4. Monitoring Well MW-4 was a dry well, and could not be purged. No samples were collected. Upon arrival the well cap was not observed on the well. According to facility representatives, this well had been dry for the last two sampling events.
5. Sample C006 was collected in the Drainage Area from Scrubber and Scrubber Water Tank, just west of the eastern facility fence. The moist yellow clay soil had no obvious discoloration or odors. HNu readings were zero before and during sampling. The additional surface soil sample and duplicate which were planned for collection from this area, could not be obtained due to ballast rocks present.
6. Samples C008, C009, and C010 were collected from the Spill Overflow Area outside the eastern facility fence. This swale runs the length of the eastern property line outside the property fence. All three samples were of dark brown sandy clay, having no obvious odors or discoloration. HNu readings from all three samples were zero before and during sampling.



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

7. Sample C011, collected in the Empty Drum Storage Area, was of moist dark brown silty loam, having no obvious discoloration or odors. HNu readings were zero before and during sampling.
8. Sample C012 was collected from the Newly Discovered Empty Drum Storage Area. This area was discovered during the SV, and thus was not part of the approved sampling plan. The sample consisted of dark reddish brown silty clay with gravel. It was collected from an area of stressed vegetation. HNu readings were zero before and during sampling.
9. Samples C013, C013D, and C015, collected from the area of Former Lagoon C, were dark brown sandy loam with no obvious odors or discoloration. HNu readings before and during sampling were zero for all three samples. Duplicate sample C013D was collected in this area, since collecting it in the Scrubber Water Drainage Area as



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

planned was not possible (see Note 12). Additional surface and subsurface soil samples planned for collection in the lagoon area could not be obtained due to the presence of ballast rocks which prevented sampling equipment from penetrating the soil surface.

10. Sample C017, collected from the Aluminum Dumpster Storage Area, was of yellow brown sandy loam and contained aluminum chunks. There were no obvious odors. HNu readings before and during sampling were zero.
11. The approved sampling plan called for a surface soil sample to be collected from the Acid Storage Area. However, this area was covered with ballast rock to a depth that prevented the sampling equipment from penetrating the soil surface. HNu readings in this area were zero.



**TABLE 2-1  
(Continued)**

**SAMPLE IDENTIFICATION AND DEVIATION FROM SAMPLING PLAN  
CHECKPOINT SYSTEMS OF PUERTO RICO  
PONCE, PUERTO RICO**

12. The approved sampling plan called for a surface soil sample to be collected from the Scrubber Water Tank Area. However, this area was covered with ballast rock to a depth that prevented the sampling equipment from penetrating the soil surface. HNu readings in this area were zero.
13. Samples C014 and C016, the two background samples, were collected in the front yard in the southwest corner of the facility, near the main door to the New Building. Sample C014 was black silty clay loam under grass cover. Sample C016 was yellow brown sandy loam. HNu readings were zero before and during sampling for both samples.
14. The trip blank was not received from either of the Contract Laboratory Program (CLP) Analytical Laboratories, (Skinner and Sherman or Gulf South Labs), and therefore, was not included.



**TABLE 2-2**  
**ANALYSIS REQUESTED**  
**CHECKPOINT SYSTEMS OF PUERTO RICO**  
**PONCE, PUERTO RICO**

SAMPLING LOCATION	SAMPLE NUMBER	ANALYSIS REQUESTED		
		VOA	SEMI-VOLATILE ORGANICS	METALS*
Equipment Blanks	C001	X	X	X
	C003	X	X	X
	C005	X	X	X
Groundwater Monitoring Well No. 1	C002	X	X	X
Groundwater Monitoring Well No. 2	C004	X	X	X
Groundwater Monitoring Well No. 3	C007	X	-	X
Drainage Area from Scrubber and Scrubber Water Tank	C006	X	X	X
Spill Overflow Area No. 1	C008	X	X	X
Spill Overflow Area No. 2	C009	X	X	X
Spill Overflow Area No. 2	C010	X	X	X
Empty Drum Storage Area	C011	X	X	X
Newly Discovered Empty Drum Storage Area	C012	X	X	X
Former Lagoon C No. 1	C013	X	X	X
Former Lagoon C No. 1 Duplicate	C013D	X	X	X
Former Lagoon C No. 2	C015	X	X	X
Aluminum Dumpster Storage Area	C017	X	X	X
Background No. 1	C014	X	X	X
Background No. 2	C016	X	X	X

\* CLP Target Compound List Metals



#### 2.4 Sample Containers, Sampling Equipment and Sample Transportation

All sample containers were provided by I-Chem Research, New Castle, Delaware. Sample bottles were series 300 (representative lots with analyses), and were not pre-preserved. Preservatives were added in the field for all VOA and inorganic water samples, and the sample pH was checked by pouring a small amount of the sample into a separate container and then measured with a strip of O-12 Hydrion<sup>TM</sup> paper.

All sampling equipment was originally decontaminated by Harding Lawson Associates personnel in Houston, Texas, by procedures specified in the approved sampling plan. No field decontamination was necessary as all sampling equipment used was dedicated (used only once).

A serially numbered CLP analysis request tag was attached to each sample container. Each sample container was sealed with a chain-of-custody seal and placed inside individual plastic bags and sealed. The bagged sample containers were placed in a clean ice chest lined with a large plastic bag partially filled with ice. Styrofoam peanuts were layered on



top of the plastic bag. The sampling containers were packed with styrofoam peanuts and arranged so that they did not touch each other or the sides or bottom of the ice chest. A completed chain-of-custody form and CLP Traffic Report form were sealed in a plastic bag, which was taped to the underside of the ice chest lid. The ice chest was then taped securely closed. Chain-of-Custody tape was affixed to the ice chest closure before shipment to the analytical laboratory by Federal Express courier service. For multiple ice chest shipments, the chain-of-custody record for each ice chest was affixed to the underside of the lid for the contents of that shipment. Copies of all chain-of-custody records and CLP Traffic Report Forms for this facility are included as Section 2.8.2. All samples were shipped priority delivery on the same day, or the morning of the day after they were collected.

## 2.5 Decontamination and Disposal

With the approval of the U.S. EPA and facility representatives, water purged from the monitoring wells was containerized and left at the facility for later disposal. Sampling trash (gloves, aluminum foil, etc.) was containerized in garbage bags and left at the site in facility dumpsters.



No field decontamination was necessary since dedicated equipment was used. Therefore, there were no decontamination solutions generated.

## 2.6 Safety

Level D protection was required at all times during sampling activities. Foot and head protection were worn by all members of the SV team and gloves were worn by members handling equipment or samples. Gloves were regularly changed and discarded and replaced with fresh sets to assure that any cross-contamination would not occur. Eye protection was worn by each team member. Tyvek jumpsuits were not worn due to high temperatures and humidity experienced during the sampling activities.

Each sampling site was routinely monitored using an HNu air monitoring device. At no time did monitoring indicate the significant presence of any contaminants. Modified Level C protection, as described in the site Health and Safety Plan, was available to every SV team member. However, site monitoring indicated that such protection was not required.



## 2.7 Summary

A site sampling visit (SV) was conducted at the Checkpoint Systems facility in Ponce, Puerto Rico, on March 15, 1989 from 1345 to 1930 hours, by representatives of Harding Lawson Associates and K. W. Brown and Associates.

A total of seventeen (17) samples were collected at this facility, including three equipment blanks, two background samples, and twelve environmental samples. The environmental samples included:

<u>SAMPLE</u>	<u>QUANTITY</u>
Groundwater Monitoring Well No. 1	1
Groundwater Monitoring Well No. 2	1
Groundwater Monitoring Well No. 3	1
Drainage Area from Scrubber and Scrubber Water Tank - Surface Soil Sample	1
Spill Overflow Area Surface Soil Samples	3
Empty Drum Storage Area Surface Soil Sample	1
Newly Discovered Empty Drum Storage Area Surface Soil Sample	2



<u>SAMPLE</u>	<u>QUANTITY</u>
Former Lagoon C Surface Soil Samples	2
Former Lagoon C Surface Soil Sample	1
Aluminum Dumpster Storage Area Surface Soil Sample	<u>1</u>
TOTAL	14

All sample collection, sample handling, and chain-of-custody procedures utilized during this SV were as specified in the approved sampling plan, or were deviations from the approved sampling plan which were approved by the Field QC Officer, and documented in this report.



## 2.8 Supporting Documents

This section includes the following Sampling Visit (SV) support documents: Sampling Team Field Log (2.8.1), Chain-of-Custody and Traffic Report Forms (2.8.2); QA/QC Photograph Log (2.8.3); QA/QC Field Log (2.8.4); and the QA/QC Audit (2.8.5).



**Section 2.8.1**

**SAMPLING TEAM FIELD LOG**



Checkpoint Systems  
3-15-89



left hotel 8 AM - to airport  
to pick up equipment - arrived  
air freight 9 AM  
left air freight/customs 11 AM

HNA ground in van - working  
correctly

arrived on site 12:45 pm - Mr. Horta  
Jerninguez at lunch

wind speed 4-12 mi. sec of  
SE temp = 98°F  
partly cloudy

met w/ Mr. Dominguez 1:45 pm  
Bill Geraldine



C#1 bailer blank taken at 14:40  
preserved sample

Well # 1 HNW reading w/well cap on = 0.0 ppm  
w/well cap off = 0.0 ppm

stick up 1.6'

Surge of well (diameter) = 2 inches

top of well to static water level = 16.80'

well depth = 24.15'

well depth - water level depth = 8.65'  
f. water

$$\frac{7.35}{\text{f. water}} \times \frac{0.015 \text{ ft}^2}{2 \text{ well}} \times 7.48 \text{ gal/ft}^3 = \underline{1.20} \text{ gal}$$

= well volume

$$\underline{1.20} \text{ gal} \times 3 = \underline{3.60} \text{ gal to purge}$$

= 3 well volumes

Sample #1  
C#2

PURGE WATER

time = 2:15 / m

temp = 29.5°C

cond = 0.002  $\mu\text{m/cm}$

pH = 7.00

depth to water =  
SAMPLE WATER

3.10 ft

31.4°C

0.0012  $\mu\text{m/cm}$

7.00

HNW reading during sampling = 0.0

pH meter calibration

time

notes



## containers

1 4L no preservative

1 1L  $\text{HNO}_3$ 

2 40mL HCL

water very turbid

C003 - bowl + knife blank  
1530 preservedWell # 2 HNu reading w/ cap on = 0 ppmw/ cap off = 0 ppm

Size of well (diameter) = 2"

stick up 3.4'

top of well to static water level = 19.33well depth = 23.70act depth - water level depth = 4.37  
ft. water $\frac{4.37}{\text{ft. water}} \times 0.215 \text{ ft}^2 \times 7.48 \text{ gal/ft}^3 = \underline{0.71} \text{ gal}$ 

= 1 well volume

 $\underline{0.71} \text{ gal} \times 3 = \underline{2.14} \text{ gals. to purge}$   
= 3 well volumes

Sample #

C004

Purged Water

time = 1550 hrs.

temp = 26.6°C

conductivity = .001 umho

pH = 7.0

Very turbid

Hnu reading during sampling 0.2

pH meter calibration

time =

notes =

depth to water =

SAMPLE WATER

1610 hrs.

26.6°C

.002

7.0



1 C005 Scoop blank  
 2 @ 1550 hrs.  
 3 (preserved)  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20  
 21  
 22  
 23  
 24  
 25  
 26

1 Well # 3 HNu reading with well cap on = 0 ppm  
 2 with well cap off = 0  
 3  
 4

size of well (diameter) = 2 inches

stick up 2.38'

top of well to static water level = 18.87'

well depth = 21.0'

well depth - water level depth = 2.13'   
 21.0 - 18.87 = 2.13'   
 ft water

$\frac{2.13'}{\text{ft water}} \times 0.218 \frac{\text{ft}^2}{\text{in}^2} \times 7.48 \frac{\text{gal}}{\text{ft}^3} = 0.35 \text{ gal}$

= 1 well volume

0.35 gal x 3 = 1.04 gal to purge  
 = 3 well volumes

Sample # C001 PURGE WATER

time = 1705 hrs.

temp = 25.1 °C

cond = .002  $\frac{\text{mg}}{\text{L}}$

pH = 7

depth to water:  
 WELL (SAMPLE) WATER

19.40

25.6

.002

7

pH meter calibration

collected 2 vials  
 1 meter

time

notes

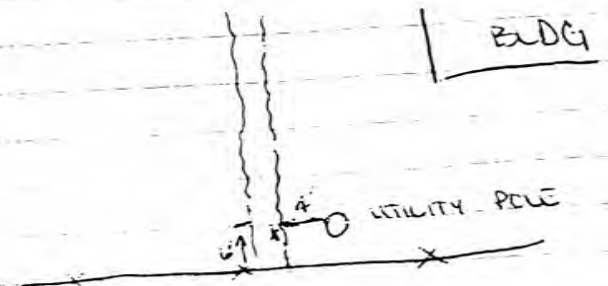


not



C006 1625 hrs.

Surface Soil Sample  
(Scrubber Water Tank  
Drain Area) ("7 on table)



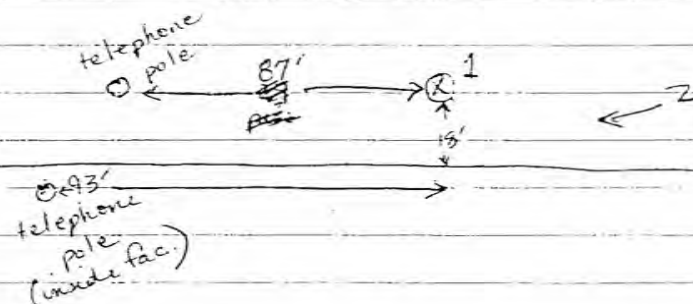
Soil Description yellow  
clay

all heads, etc (at bottom)  
could not be removed  
from VHS



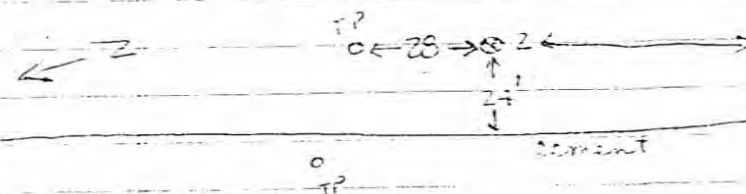
1 C008 17:20 Spill Area Sa #1  
2 dark brown sa clay  
3 no odors / <sup>no</sup> obvious cont  
4  
5  
6  
7

8 embankment



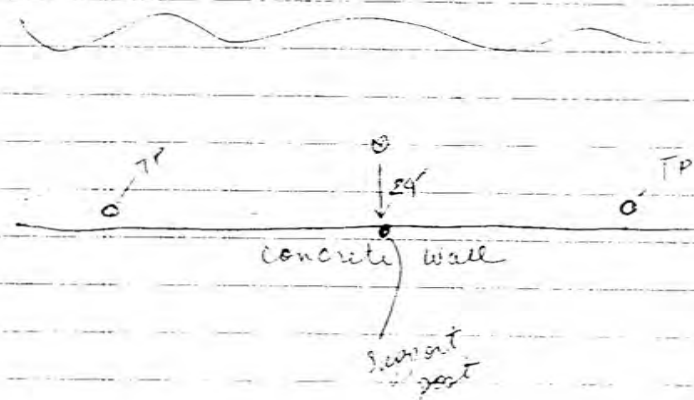
1 C009 17:40 Spill Area Sa #2  
2 dark brown sa clay  
3 no odors / <sup>no</sup> obvious cont.  
4  
5  
6  
7

8 embankment



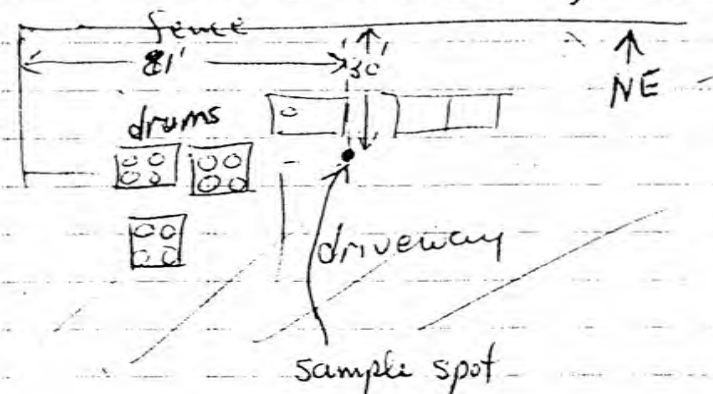


1 C010 Spill Area Sample #3  
 2 18:00 dark brown s.s. clay  
 3 no odors or cont



~~Layer C #1~~

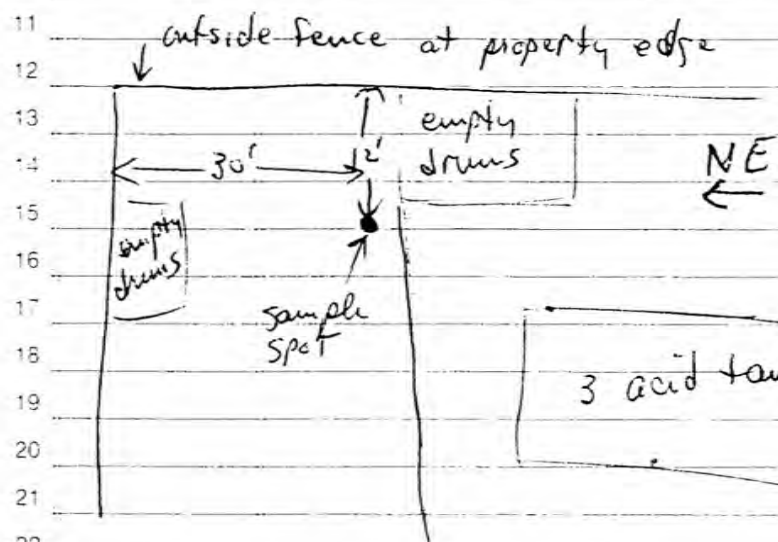
1 C011 Empty drum storage area  
 2 18:35 Dark brown silty loam  
 3 Some discoloration, moist



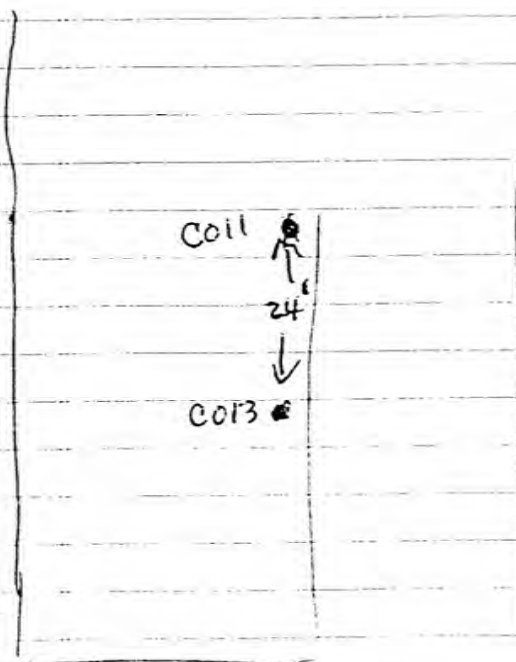
81' from fence to left  
 30' " " at top



1 C012 Newly discovered empty drum  
2 18:40 storage area  
3  
4  
5  
6  
7  
8  
9  
10  
11



1 C013 Lagoon C #1  
2 18:50 dark brown sandy loam  
3  
4  
5  
6  
7  
8  
9  
10  
11



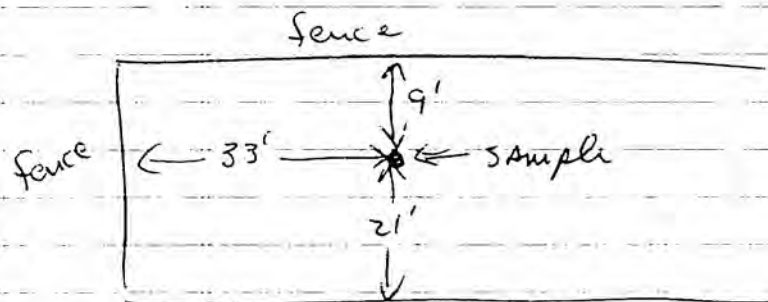


#C014 shipped number shipped  
see after C016 →

1 C015 Former Lagari C#2

2 19:00

3 dark brown sandy loam  
4 no odor, no discoloration

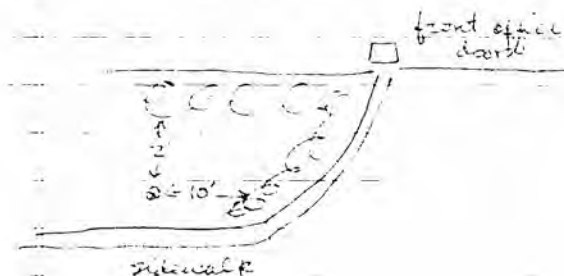


14 Driveway



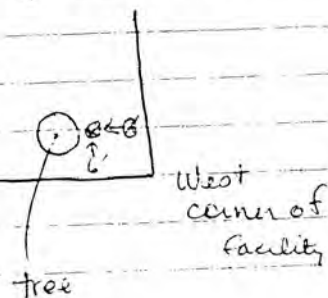
1 C016 Background #2

2 19:17



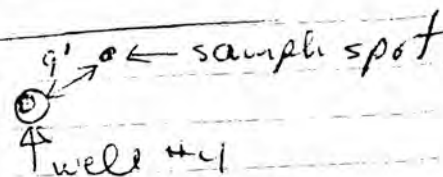


CO14 Background #1  
19:08 black si clay loam  
under grass cover



6' from each  
fence line

CO17 ~~19:30~~ Aluminum Dumpster SA  
19:30 yellow brown sandy loam,  
aluminum chunks in  
surface soil





**Section 2.8.2**

**CHAIN-OF-CUSTODY AND TRAFFIC REPORT FORMS**



ENVIRONMENTAL PROTECTION AGENCY - REGION II  
Environmental Services Division  
EDISON, NEW JERSEY 08817

Page No.



## CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY — REGION II  
 Environmental Services Division  
 EDISON, NEW JERSEY 08817

Name of Unit and Address: 1000 1st St Edison, NJ 08817						
Sample Number	Number of Containers	Description of Samples				
4013	1	Water, 1000 1st St, Edison, Tag 4222				
4014	1	Water, 1000 1st St, Edison, Tag 4223				
4015	1	Water, 1000 1st St, Edison, Tag 4224				
4016	1	Water, 1000 1st St, Edison, Tag 4225				
4017	1	Water, 1000 1st St, Edison, Tag 4226				
4018	1	Water, 1000 1st St, Edison, Tag 4227				
4019	1	Water, 1000 1st St, Edison, Tag 4228				
Person Assuming Responsibility for Sample:					Time	Date
John J. [Signature]					12:15 PM	3-15
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
4013	John J. [Signature]					
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	



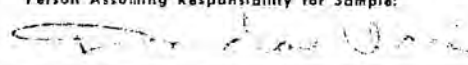
ENVIRONMENTAL PROTECTION AGENCY - REGION II  
Environmental Services Division  
EDISON, NEW JERSEY 08817

Page No.



## CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY - REGION II  
Environmental Services Division  
EDISON, NEW JERSEY 08817

Name of Unit and Address:					
CUMMINS ENGINE CO. INC. P.O. BOX 1000, KILBUCK, N.J. 08848					
Sample Number	Number of Containers	Description of Samples			
CO10	2	SOIL 2 DIB, OIL BAG 11, TAG 2663			
CO10	1	SOIL 1 DIB, OIL BAG 11, TAG 2669			
CO11	2	SOIL 2 DIB, OIL BAG 12, TAG 2670			
CO11	1	SOIL 1 DIB, OIL BAG 12, TAG 2671			
CO12	2	SOIL 2 DIB, OIL BAG 11, TAG 2672			
CO12	1	SOIL 1 DIB, OIL BAG 11, TAG 2673			
CO13	2	SOIL 2 DIB, OIL BAG 12, TAG 2674			
CO13	1	SOIL 1 DIB, OIL BAG 12, TAG 2675			
CO13	2	SOIL 2 DIB, OIL BAG 12, TAG 2676			
CO13	1	SOIL 1 DIB, OIL BAG 12, TAG 2677			
CO14	2	SOIL 2 DIB, OIL BAG 12, TAG 2678			
CO14	1	SOIL 1 DIB, OIL BAG 12, TAG 2679			
Person Assuming Responsibility for Sample:		Time Date			
		12:00 AM 2-1			
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
CO12	John W. [illegible]				
CO10					
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody



1.8.3 VISUAL SITE INSPECTION PHOTOGRAPH LOG

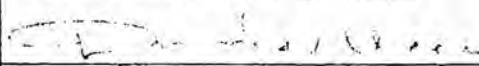






## CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY — REGION II  
 Environmental Services Division  
 EDISON, NEW JERSEY 08817

Name of Unit and Address:						
CHLORPENTHENE 1-NCE FRACTION 2100						
Sample Number	Number of Containers	Description of Samples				
CO15	2	SOIL 2 JOL	OTR BAG 14	TAG	3680	
CO15	1	SOIL 1 B02	OTR BAG 14	TAG	3681	
CO16	2	SOIL 2 JOL	OTR BAG 15	TAG	3682	
CO16	1	SOIL 1 B02	OTR BAG 15	TAG	3683	
CO17	2	SOIL 2 JOL	OTR BAG 16	TAG	3684	
CO17	1	SOIL 1 B02	OTR BAG 16	TAG	3685	
Person Assuming Responsibility for Sample:					Time	Date
					12:00 AM	3-15
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
CO15 CO17	W. B. ...					
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody	





USEPA CONTRACT LABORATORY PROGRAM  
SAMPLE MANAGEMENT OFFICE  
P.O. BOX 818 ALEXANDRIA, VA 22313  
703/557-2490 FTS-557-2490

CASE NO: 11602

EXHIBIT 8  
(IF APPLICABLE)

# ORGANIC TRAFFIC REPORT

(FOR CLP USE ONLY)

<b>TYPE OF ACTIVITY (CIRCLE ONE)</b> ① SUPERFUND—PA SI ESI RIFS RD RA ER NPLD O&M OTHER _____ NON-SUPERFUND—RCRA PROGRAM		<b>SHIP TO:</b> ③ GULF SOUTH ENV. LAB 6801 PRESS DR. EAST BLDG. NEW ORLEANS, LA. 70128 ATTN: CINDY PALAZZO		<b>SAMPLE DESCRIPTION</b> ⑥ (ENTER IN BOX A) 1. SURFACE WATER 4. SOIL 2. GROUND WATER 5. SEDIMENT 3. LEACHATE 6. OIL (SAS) 7. WASTE (SAS)	
SITE NAME: CHECKPOINT		SAMPLING DATE: 3-15-89 ④		TRIPLE VOLUME REQUIRED FOR MATRIX SPIKE/DUPLICATE AQUEOUS SAMPLE	
CITY, STATE: Ponce, P.R. SITE SPILL ID: _____		BEGIN: 1300 END: 2000		SHIP MEDIUM AND HIGH CONCENTRATION SAMPLES IN PAINT CANS	
REGION NO: II SAMPLING COMPANY ② HARDING LAWSON		DATE SHIPPED: 3-16-89 CARRIER: FedEx ⑤		SEE REVERSE FOR ADDITIONAL INSTRUCTIONS	
SAMPLER: (NAME) Doug UCC1		AIRBILL NO: 400-9579-4786/4790			

CLP SAMPLE NUMBER (FROM LABELS)	SAMPLE DESCRIPTION (FROM BOX 1) 1 2 3 4 5 6 7	CONCENTRATION L = LOWMED H = HIGH (SAS)	RAS ANALYSIS				SPECIAL HANDLING	STATION LOCATION
			VOLATILE	BASE/NEUT /ACID	PESTICIDE /PCB's			
BAG 00	2	L	X	X				C001
BAG 01	2	L	X	X				C002
BAG 02	2	L	X	X				C003
BAG 03	2	L	X	X				C004
BAG 04	2	L	X	X				C005
BAG 05	4	L	X	X				C006
BAG 06	2	L	X					C007
BAG 07	4	L	X	X				C008
BAG 08	4	L	X	X				C009
BAG 09	4	L	X	X				C010
BAG 10	4	L	X	X				C011
BAG 11	4	L	X	X				C012
BAG 12	4	L	X	X				C013
BAG 12	4	L	X	X			DUPLICATE	C013 D
BAG 13	4	L	X	X				C014
BAG 14	4	L	X	X				C015
BAG 15	4	L	X	X				C016
BAG 16	4	L	X	X				C017





USEPA CONTRACT LABORATORY PROGRAM  
SAMPLE MANAGEMENT OFFICE  
P.O. BOX 818 ALEXANDRIA, VA 22313  
703/557-2490 FTS-557-2490

CASE NO: 1160Z

SAS NO:  
(IF APPLICABLE)

# INORGANIC TRAFFIC REPORT

(FOR CLP USE ONLY)

<b>TYPE OF ACTIVITY (CIRCLE ONE)</b> ① SUPERFUND—PA SI ESI RIFS RD RA ER NPLD O&M OTHER NON-SUPERFUND—RCRA PROGRAM		<b>SHIP TO:</b> ③ SKINNER & SHERMAN 300 2ND AVENUE WALTHAM, MASS 02254		<b>SAMPLE DESCRIPTION</b> ⑥ (ENTER IN BOX A) 1. SURFACE WATER 4. SOIL 2. GROUND WATER 5. SEDIMENT 3. LEACHATE 6. OIL (SAS) 7. WASTE (SAS)	
<b>SITE NAME:</b> CHECKPOINT		<b>ATTN:</b> JOAN LACAVA		<b>DOUBLE VOLUME REQUIRED FOR MATRIX SPIKE/DUPLICATE AQUEOUS SAMPLE</b>	
<b>CITY, STATE:</b> PONCE, PR <b>SITE SPILL ID:</b>		<b>SAMPLING DATE:</b> 3-15-89 ④			
<b>REGION NO:</b> II <b>SAMPLING COMPANY:</b> HARDING LAWSON ②		<b>BEGIN:</b> 1:00 <b>END:</b> 20:00		<b>SHIP MEDIUM AND HIGH CONCENTRATION SAMPLES IN PAINT CANS</b>	
<b>SAMPLER (NAME):</b> ELANI GRAY		<b>DATE SHIPPED:</b> 3-15-89 <b>CARRIER:</b> FE ⑤			
		<b>AIRBILL NO:</b> 400-9579-4775		<b>SEE REVERSE FOR ADDITIONAL INSTRUCTIONS</b>	

CLP SAMPLE NUMBER (FROM LABELS)	A SAMPLE DESCRIPTION (FROM BOX 1) 1 2 3 4 5 6 7	B CONCENTRATION L = LOW M = MED H = HIGH (SAS)	C RAS ANALYSIS							D SPECIAL HANDLING	E STATION LOCATION
			TOTAL METALS	CYANIDE	DISSOLVED METALS	HIGH ONLY (SAS)					
						SULFIDE	PH	CONDUCTIVITY	OXIDANTS		
MBR 880	2	L	X								C001
MBR 881	2	L	X								C002
MBR 882	2	L	X								C003
MBR 883	2	L	X								C004
MBR 884	2	L	X								C005
MBR 885	4	L	X								C006
MBR 886	2	L	X								C007
MBR 887	4	L	X								C008
MBR 888	4	L	X								C009
MBR 889	4	L	X								G10
MBR 890	4	L	X								C011
MBR 891	4	L	X								C012
MBR 892	4	L	X								C013
MBR 892	4	L	X							Duplicate	C013 D
MBR 893	4	L	X								C014
MBR 894	4	L	X								C015
MBR 895	4	L	X								C016
MBR 896	4	L	X								C017



**Section 2.8.4**  
**QA/QC FIELD LOG**



5.2.1 Groundwater Sampling Procedures

1. Place a plastic dropcloth around the well to prevent sampling equipment and rope from contacting the ground. *Yes*
2. Monitor the air adjacent to the well cap using an HNU, to determine the potential for hazardous conditions or toxic effects on workers. *Yes 0/0*
3. Inspect the area surrounding the well casing and record any stick-up. *1.6'*
4. Monitor the air in the wellhead for organic vapors (HNU meter), and record the measurements. *NONE*
5. Using an electric sounding instrument, measure the depth to water and to the bottom of the well. As the electric sounding instrument is being removed from the well, decontaminate it by rinsing with distilled/deionized water. *1668" → water / 24.15*
6. Utilizing the measurements obtained in step 4, calculate the fluid volume in the casing. *3.6 gal - (3 well volumes)*
7. If wells to be sampled have dedicated bailers, each well will be purged using each well's dedicated bailer. *NO - Use PVC bailer*
8. If each well does not have a dedicated bailer, the following procedure will be used to purge each well:
  - o Premeasure a length of new cotton rope from a roll. The rope should be of sufficient length to allow for water-level drawdown during sampling. The roll of rope will be protected from contamination at all times by keeping it wrapped in new aluminum foil. *Yes*
  - o Select a new or decontaminated teflon bailer. Check the operation of check valve assemblies to confirm free operation. *NO - Use PVC bailer*
  - o Attach the bailer to the cotton rope. *Yes*
  - o Lower the bailer slowly until it contacts the water surface. Allow the bailer to sink and fill with water. *Yes*
  - o Slowly raise the bailer to the surface. Do not allow the bailer line to contact the ground or the side of the well. *Yes*
  - o Open the bottom emptying device to allow a slow discharge into a suitably sized receptable. *NO - Pour from top*
  - o Measure the pH, temperature, and conductivity of the purge water. *Yes (pH: 7 / 29.5°C / 0.02 @ 2mm/cm)*
  - o Observe and record any color, odor or turbidity of the purged water, purge a minimum of three casing volumes. *Yes - No very turbid*
  - o Note: prior to SV, arrange with the facility for an acceptable means to dispose of the purged well water (e.g., industrial storm sewer, etc.)

Monitoring Well 1

HLA - P002

After purging  
30.48e



9. Select a new teflon bailer. Check the operation of check valve assemblies to confirm free operation. *Yes*
10. Premeasure a length of new cotton rope and attach it to the bailer. The rope should be of sufficient length to allow for water-level drawdown during sampling. *Yes*
11. Lower bailer slowly until it contacts the water surface. *Yes*
12. Allow bailer to sink and fill with minimal surface disturbance to minimize degassing of water. *Yes*
13. Slowly raise bailer to surface. Allow loops of bailer rope to fall into a bucket lined with new aluminum foil. *No*
14. Open bottom emptying device to allow slow discharge and ensure the water flows gently down the side of the sample bottle with minimal entry turbulence. Measurements of pH, temperature, specific conductance, and turbidity should be obtained from the first sample. *hold rope w/o connecting to (extra person)*  
*pH 7 / 31.4°C / 0.001 @ 2m/cm*
15. Repeat above steps as needed to acquire a sufficient sample volume to fill all containers. *Yes*
16. Samples should be collected and containerized in the order of the parameters' volatilization sensitivity. The following table lists the preferred collection order for the groundwater parameters.

ORDER OF PREFERRED SAMPLE COLLECTION

1. Volatile organics (VOA) - Duplicate
2. Extractable organics
3. Total metals

17. Special care should be taken in transferring water from the bailer to sample containers so that the sample is not aerated. This is especially important for volatile compounds, but is also a concern for metal samples so that oxidation is avoided. *Yes*
18. Fill sample bottles leaving sufficient headspace for volume expansion during aircraft transport. An exception to this is the iso-ml vial which must be filled completely. Make sure that a Teflon-liner is present in the cap if required. Secure the cap tightly. *Yes*
19. Ensure that the sampling container is decontaminated prior to further handling (see Section 6.3, Sampling Quality Assurance). *Yes*
20. Label the sample bottle with an appropriate tag. Be sure to complete the tag with all necessary information. Use indelible ink. Complete chain-of-custody documents and field logbook. *Yes*
21. Allow the sample collection system to drain and then disassemble. *Yes*

HCA-0002

W01



5.2.1 Groundwater Sampling Procedures

1. Place a plastic dropcloth around the well to prevent sampling equipment and rope from contacting the ground. *Yes*
2. Monitor the air adjacent to the well cap using an HNU, to determine the potential for hazardous conditions or toxic effects on workers. *Yes - 0*
3. Inspect the area surrounding the well casing and record any stick-up. *3.4 ft - 19.33/23.70 - 17.9*
4. Monitor the air in the wellhead for organic vapors (HNU meter), and record the measurements. *Yes - 0*
5. Using an electric sounding instrument, measure the depth to water and to the bottom of the well. As the electric sounding instrument is being removed from the well, decontaminate it by rinsing with distilled/deionized water. *19.33/23.70*
6. Utilizing the measurements obtained in step 4, calculate the fluid volume in the casing. *2.14 gal - 3 BUs*
7. If wells to be sampled have dedicated bailers, each well will be purged using each well's dedicated bailer. *No ded bailers*
8. If each well does not have a dedicated bailer, the following procedure will be used to purge each well:
  - o Premeasure a length of new cotton rope from a roll. The rope should be of sufficient length to allow for water-level drawdown during sampling. The roll of rope will be protected from contamination at all times by keeping it wrapped in new aluminum foil. *Yes*
  - o Select a new or decontaminated teflon bailer. Check the operation of check valve assemblies to confirm free operation. *No - use PVC*
  - o Attach the bailer to the cotton rope. *Yes*
  - o Lower the bailer slowly until it contacts the water surface. Allow the bailer to sink and fill with water. *Yes*
  - o Slowly raise the bailer to the surface. Do not allow the bailer line to contact the ground or the side of the well. *Yes*
  - o Open the bottom emptying device to allow a slow discharge into a suitably sized receptable. *Yes*
  - o Measure the pH, temperature and conductivity of the purge water.
  - o Observe and record any color, odor or turbidity of the purged water, purge a minimum of three casing volumes. *Yes - Very turbid*
  - o Note: prior to SV, arrange with the facility for an acceptable means to dispose of the purged well water (e.g., industrial storm sewer, etc.)

Check ft. WUC 2  
 0004

26.600  
 001 min @ 21  
 pH 7



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes - O*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *LATES*
10. Record sample information in the field logbook. *Yes*

*Yellow clay (wet)*  
*No Crs / No Obvious*  
*contamin*

*Fillage Area below Tank / Scrubber  
 Water  
 OOL*



5.2.1 Groundwater Sampling Procedures

1. Place a plastic dropcloth around the well to prevent sampling equipment and rope from contacting the ground. *Yes*
2. Monitor the air adjacent to the well cap using an HNU, to determine the potential for hazardous conditions or toxic effects on workers. *Yes - 0*
3. Inspect the area surrounding the well casing and record any stick-up. *2.38 ft.*
4. Monitor the air in the wellhead for organic vapors (HNU meter), and record the measurements. *Yes - 0*
5. Using an electric sounding instrument, measure the depth to water and to the bottom of the well. As the electric sounding instrument is being removed from the well, decontaminate it by rinsing with distilled/deionized water. *18.87/21.00*
6. Utilizing the measurements obtained in step 4, calculate the fluid volume in the casing.
7. If wells to be sampled have dedicated bailers, each well will be purged using each well's dedicated bailer.
8. If each well does not have a dedicated bailer, the following procedure will be used to purge each well:
  - o Premeasure a length of new cotton rope from a roll. The rope should be of sufficient length to allow for water-level drawdown during sampling. The roll of rope will be protected from contamination at all times by keeping it wrapped in new aluminum foil.
  - o Select a new or decontaminated teflon bailer. Check the operation of check valve assemblies to confirm free operation.
  - o Attach the bailer to the cotton rope.
  - o Lower the bailer slowly until it contacts the water surface. Allow the bailer to sink and fill with water.
  - o Slowly raise the bailer to the surface. Do not allow the bailer line to contact the ground or the side of the well.
  - o Open the bottom emptying device to allow a slow discharge into a suitably sized receptable.
  - o Measure the pH, temperature and conductivity of the purge water.
  - o Observe and record any color, odor or turbidity of the purged water, purge a minimum of three casing volumes.
  - o Note: prior to SV, arrange with the facility for an acceptable means to dispose of the purged well water (e.g., industrial storm sewer, etc.)

WU3 - 0.007

pH 7

Temp. 25.1°C

Cond 002.02

Very Turbid



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *YES*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *YES*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *YES*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *YES*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *YES*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *YES*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *YES*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *YES*
9. Complete all chain-of-custody documents. *YES*
10. Record sample information in the field logbook. *YES*

*Dark Brown Sandy Clay*

*No Cracks*

*No Significant Waste*

*Spill Area #1  
CEC8*



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Later*
10. Record sample information in the field logbook. *Yes*

Spill Area #2  
 10/1/93

Dark Brown  
 Sandy Clay  
 No GSA  
 No Color (was 1)



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Later*
10. Record sample information in the field logbook. *Yes*

*Dark Brown Sandy Clay*

*No Oil*

*No Discoloration*

Spill Area  
 3-000010



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes - 0*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil.
9. Complete all chain-of-custody documents. *LATER*
10. Record sample information in the field logbook. *Yes*

*Dark brown silty loam*

*Some discoloration*

*MOIST*

*10/19*

*CO-1*

*Empty brown Sheaf  
Area S#1*



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *X20*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material.
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop.
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container.
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended.
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters.
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice.
9. Refill the hole from which the sample was collected with the remaining excavated soil.
9. Complete all chain-of-custody documents.
10. Record sample information in the field logbook.

New York, NY DSA  
2012

*Dark*

*Dark Reddish Brown*

*Silty Clay*

*127 GRAVE!*

*NOISES*



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes - O*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Yes*
10. Record sample information in the field logbook. *Yes*

*Mark Brown SAUCY team*

*11 - ~~LC~~ #1 EDSA*

*12 - ~~LC~~ New ISA*

*13 - LC #1*

*13a - Dup*

*15 + 14 - LC #2*

*CE 13*

*L. Agnew  
#1*



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Yes*
10. Record sample information in the field logbook. *Yes*

*Approved*  
*#1*  
*J. W. P.*

*Approved*  
*0013*



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes - CO*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Yes*
10. Record sample information in the field logbook. *Yes*

1-2014  
 Rkey

*Brown-Yellow*  
*Sandy Clay*







### 5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers.
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material.
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop.
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container.
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended.
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters.
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice.
9. Refill the hole from which the sample was collected with the remaining excavated soil.
9. Complete all chain-of-custody documents.
10. Record sample information in the field logbook.

7/10/06  
B. J. J.

Brown Yellow

Sandy Clay



5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNU to determine the potential for hazardous conditions or toxic effects on workers. *Yes*
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material. *Yes*
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. *Yes*
4. Place the sample into a glass or stainless steel pan and mix thoroughly (note: for volatile analysis, mixing is not recommended). Place the sample into the appropriate sample container. *Yes*
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. *Yes*
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters. *Yes*
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice. *Yes*
9. Refill the hole from which the sample was collected with the remaining excavated soil. *Yes*
9. Complete all chain-of-custody documents. *Yes*
10. Record sample information in the field logbook. *Yes*

*Al Storage Area*  
*Aluminum Soil*  
*Yellow*  
*Brown*  
*Gray/Black*



**Section 2.8.5**

**QA/QC AUDIT**

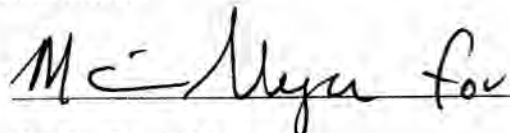


QUALITY ASSURANCE REPORT OF SITE SAMPLING  
AT THE CHECKPOINT FACILITY  
MARCH 15, 1989

In general, sampling activities were conducted following the standard operating procedures as described in the final site sampling plan. The A. T. Kearney Sampling Team made every effort to follow the accepted procedures and obtain representative samples. A total of 14 environmental samples were collected from the Checkpoint facility. These included two background soil samples, two surface soil samples from the area near former Lagoon C, three surface soil samples from the Spill area, one surface soil sample from the Drainage below the scrubber water tank, one surface soil sample from the Empty Drum Storage area, one surface soil sample from the new Empty Drum Storage area, one surface soil sample from the Aluminum Storage area, and three monitoring well samples. Monitoring Well #4 was not sampled as the well was found with the well cap off, and the well was dry. Monitoring Well #3 was purged to dryness, allowed to recharge, and sampled approximately 2 hours later after completion of all surface soil sampling activities. Blank samples collected included a bailer blank, a scoop blank, and a bowl and knife blank. There were no modifications to the sampling protocols for surface soil collection. Two modifications were made to the monitoring well protocol. First, the wells were purged with a clean PVC bailer as the facility did not have dedicated bailers. All bailers, both PVC and teflon were shipped to the sampling team after lab decontamination and were received wrapped in aluminum foil. In addition, the rope attached to the bailer was held above the monitoring well instead of placing the rope on aluminum foil. Since two persons worked on each monitoring well, this modification did not affect the integrity of the sampling procedure. At no time was the rope allowed to touch the soil or plastic sheeting around the well.

Due to delays caused by equipment shipping and customs, sampling was completed after dark. All sampling locations were investigated during daylight hours. The samples collected using artificial lighting included the second lagoon C surface soil sample, the aluminum storage area surface soil sample, both background soil samples, and the samples from Monitoring Well #3.

Twelve samples were collected to describe the potential for a release from the waste management areas of the Checkpoint facility. In addition, quality control samples included two background soil samples and equipment blanks for the scoop, bowl and knife, and teflon bailer. The overall quality of the sampling episode at the Checkpoint facility was more than adequate. Sample collection was conducted in a proper manner, and the specific locations employed for sample collection should provide an adequate description of the potential for a release from the waste management areas investigated. The Kearney sampling team did an excellent job under very difficult working conditions.



K. C. Donnelly  
Quality Assurance Officer



**ATTACHMENT A**  
**SAMPLING PLAN**



SAMPLING PLAN FOR THE RFA SAMPLING VISIT  
CHECKPOINT SYSTEMS OF PUERTO RICO, INC.  
PONCE, PUERTO RICO  
EPA ID NO. PRD091126037

Prepared for:

U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, New York 10278

Prepared by:

A. T. Kearney, Inc.  
225 Reinekers Lane  
Alexandria, Virginia 22314

and

Harding Lawson Associates  
6220 Westpark Drive, Suite 100  
Houston, Texas 77057

In response to:

EPA Contract No. 68-01-7038  
Work Assignment No. R02-01-54

March 1989



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## 1.0 INTRODUCTION

As part of the Corrective Action Program outlined in the 1984 Hazardous Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA), the U.S. EPA is conducting assessments of all operating, closed, or closing hazardous waste facilities. Consequently, the agency has established a RCRA Facility Assessment (RFA) to identify releases or likely releases requiring further investigation. The RFA process includes three main components: (1) the Preliminary Review (PR), (2) the Visual Site Inspection (VSI), and (3) the Sampling Visit (SV). The SV is performed in cases where EPA determines that the results of the PR and VSI indicate that sampling is warranted at specific solid waste management units (SWMUs) and/or other areas of concern.

The PR and VSI have been completed for the Checkpoint Systems of Puerto Rico (Checkpoint Systems) facility located in Ponce, Puerto Rico, and EPA has determined that a SV is warranted. EPA has requested the A. T. Kearney Team to conduct the SV for this facility and to prepare an RFA sampling plan for this activity.

This document details the proposed procedures, rationale, and logistics for sampling soil and groundwater associated with the SWMUs or areas of concern at the Checkpoint Systems facility. The document has been prepared using information from the November 1988 PR and VSI, which were performed as part of the RFA.

This SV will be conducted to determine the suspected release potential associated with the SWMUs and other areas of concern. The results of the SV are intended to support decisions regarding the need for further actions at the facility. The results are not intended to represent a detailed characterization of contamination at the facility or to lead to a statistical inference.



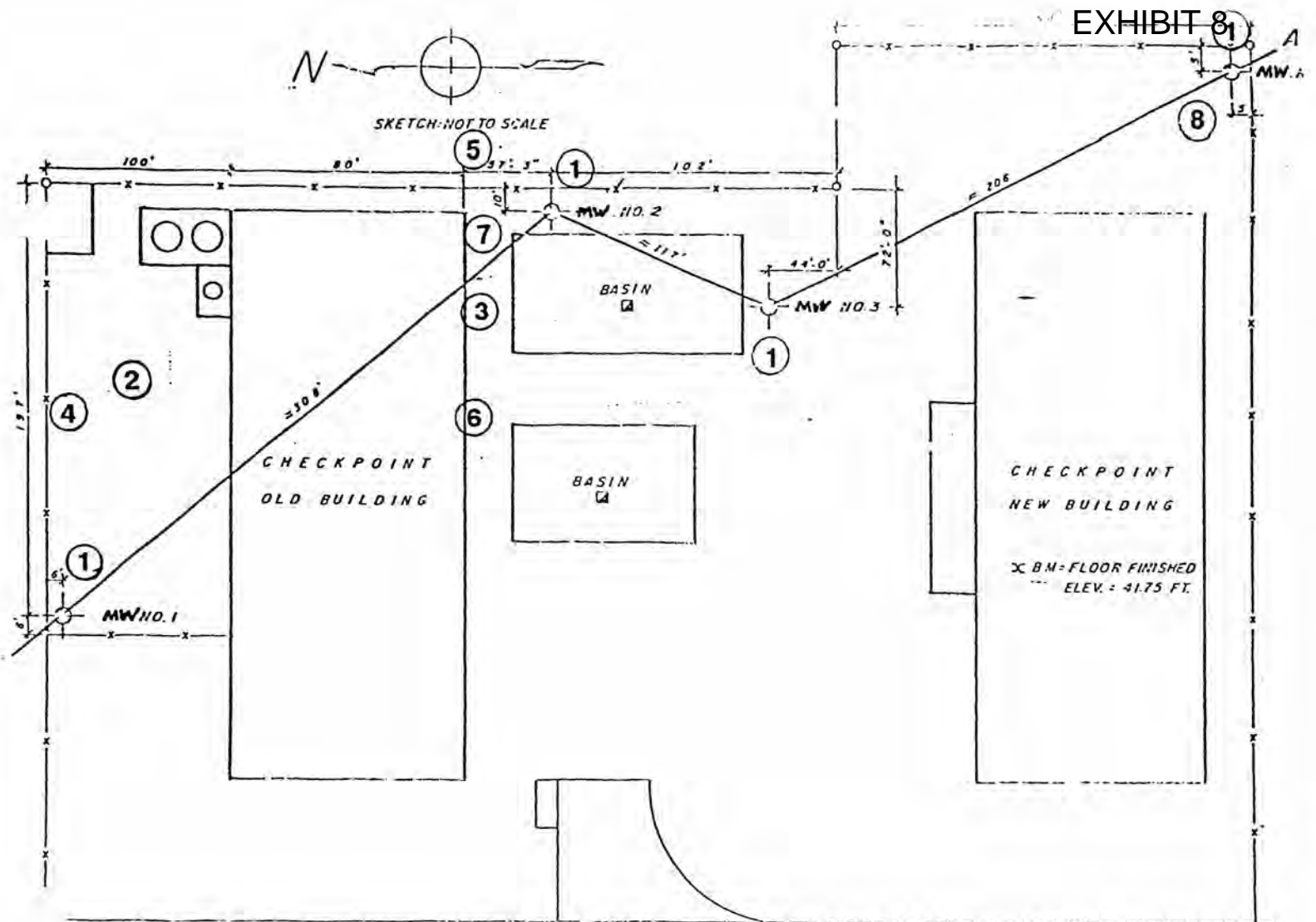
This RFA sampling plan addresses the activities to be carried out by the sampling team during the SV at the Checkpoint Systems facility. The existing background data for the facility have been collected and evaluated. Sources of this information include records and files from the owner/operator, the EPA Regional office in New York, and the Puerto Rico EQB office in San Juan. Areas of the facility were identified by the PR/VSI team which require soil and groundwater sampling. The locations of these areas are indicated on Figure 1. These areas either presently receive hazardous waste, have been identified as areas of past or present hazardous waste management activities, or have been identified as areas having potential for release of hazardous wastes or hazardous constituents.

The SV will involve the following activities:

1. Preparing the sampling and safety plan;
2. Scheduling of the SV with EPA Region II and Puerto Rico EQB personnel;
3. Notifying the owner/operator of the SV; determining if split samples will be requested; discussing options for disposal/treatment of hazardous waste generated during the SV;
4. Meeting with plant personnel to discuss sampling locations and conducting a presampling visit (PSV);
5. Conducting the SV; and
6. Preparing the final SV report.

This sampling plan has been prepared to provide guidance for all SV field activities and to ensure that all sampling procedures are in accordance with EPA protocol. Any deviations from this sampling plan during the sampling event will be based on the judgment and approval of the EPA Technical Monitor or representative and/or the quality control inspector present on-site, and will be recorded in the field logbook.





## LEGEND

- |                                |                                |
|--------------------------------|--------------------------------|
| 1 GROUNDWATER MONITORING WELLS | 5 SPILL AREA                   |
| 2 EMPTY DRUM STORAGE AREA      | 6 ACID STORAGE AREA            |
| 3 SCRUBBER WATER TANK AREA     | 7 SCRUBBER WATER DRAINAGE AREA |
| 4 FORMER LAGOON C              | 8 ALUMINUM DUMPSTER            |

JACA, SIERRA & RIVERA  
TESTING LABORATORIES

GROUND WATER MONITORING WELLS  
CHECKPOINT PLANT SITE

ST. JACOB'S CATHEDRAL PARK  
P.O. BOX 1000  
DATE: 10-1-81  
BY: JACA, SIERRA & RIVERA

FIGURE 1

CHECKPOINT SYSTEMS SAMPLING LOCATIONS



The subsections of this document establish the procedures which will be followed during the SV. The Introduction defines the SV and its role as part of the RFA program. The section on Project Organization lists the parties responsible for each part of the SV. The Site Background section provides a brief description of site background and current activities. The Sampling Criteria section describes the media to be sampled, sampling density, and the choice of parameters for analysis. The sampling methodologies that will be used during the SV are presented in the Sampling Procedures section. The document also includes a Sampling Quality Assurance section and a health and safety plan.



## 2.0 PROJECT ORGANIZATION AND PERSONNEL REQUIREMENTS

Table 1 depicts the project management, organization, and personnel requirements for the Checkpoint Systems SV. It includes the name, affiliation, functional title and a brief description of the responsibilities of the SV personnel.



Table 1

Project Organization and Personnel  
Requirements for the Checkpoint Systems SV

Name	Affiliation	Title	Brief Description of Responsibilities
John Gorman	U.S. EPA	EPA Technical Monitor	<ul style="list-style-type: none"> <li>- Schedule sampling visit</li> <li>- Interact with facility owner/operator</li> <li>- Provide regulatory input</li> <li>- Approve sampling plan</li> <li>- Assist in sampling guidance QC</li> </ul>
Gayle Kline	A. T. Kearney	Technical/Director Work Assignment Manager	<ul style="list-style-type: none"> <li>- Overall project management</li> <li>- Provide staff</li> </ul>
Shawn DeLorey	A. T. Kearney	Work Assignment Manager, Field QC Officer	<ul style="list-style-type: none"> <li>- Overall management of SV</li> <li>- Project manager</li> </ul>
Elani Gray	Harding Lawson Associates	Field Team Leader	<ul style="list-style-type: none"> <li>- Supervise sampling activities</li> <li>- Review SOP</li> <li>- Coordinate health and safety plan</li> <li>- Supervise development of SV report</li> <li>- Safety Officer</li> </ul>
K. C. Donnelly	K. W. Brown & Associates	Field QC Officer	<ul style="list-style-type: none"> <li>- Ensure field activities are conducted in accordance with sampling plan and health and safety plan</li> </ul>
Joan Middleton Douglas Ucci David Perez Kathy Farr	Harding Lawson Associates	Sampling Technicians	<ul style="list-style-type: none"> <li>- Perform designated field activities (e.g. sampling, decontamination)</li> <li>- Assist in the development of SV report</li> </ul>



### 3.0 SITE BACKGROUND

The Checkpoint Systems of Puerto Rico facility is located in the Sabanetas Industrial Park, in Ponce, Puerto Rico. The facility is located at latitude 18 degrees, 00 minutes, 36 seconds and longitude 66 degrees, 34 minutes, 28 seconds. The facility covers approximately 2.0 acres.

The Checkpoint Systems facility manufactures electronic aluminum labels which are applied to consumer products as theft prevention devices. The manufacturing process involves the etching of aluminum with ferric chloride and hydrochloric acid. The etched aluminum pieces are heat sealed between a printed paper label and an adhesive backing. The raw materials used in the etching process include aluminum, ferric chloride, hydrochloric acid, paper, adhesive glue and trichloroethane (a solvent used in conjunction with the adhesive application).

Wastes generated at this site include aluminum chloride and ferrous chloride (which are used until no longer feasible) and wastewater from the vent scrubber system on the etching plating baths. The wastewater contains ferric chloride, aluminum chloride, and muriatic acid.



#### 4.0 SAMPLING CRITERIA

This section represents the sampling criteria used for this SV. These criteria include: (1) sampling locations, and (2) analytical parameters. Sampling locations address sample collection areas, specific sampling points, sampling media, density, depth, and the location of background sampling areas. The analytical parameters section describes the constituents for analysis and the special presampling preparation procedures.

##### 4.1 Sampling Locations

The relative locations of the sample collection areas at the facility are shown in Figure 1 and the expected sampling approaches are described in Table 2. These sampling locations include:

1. Groundwater Monitoring Wells

Four groundwater monitoring wells were installed at the facility in 1985 to assess and monitor groundwater quality. These wells were installed as a result of the operation and subsequent closure of two lined surface impoundments. One groundwater sample will be collected from each well.

2. Empty Drum Storage Area

This unit is an area where "empty" acid drums are stored (these drums are believed to contain residues). A surface soil sample will be collected from this unit.

3. Scrubber Water Tank Area

This unit is an open-top tank which receives wastewater from the vent scrubber and etching process. One surface soil sample will be collected from the area surrounding this unit.

4. Former Lagoon C

This unit is an area which was temporarily used in 1983 in an evaporation experiment (received waste ferrous and aluminum chloride solutions). Seven surface and subsurface (to a maximum 3-foot depth) soil samples will be collected (based on field discretion) from this area.

5. Spill Overflow Area

This unit is a low area outside facility boundaries which received overflow from Lagoon A during a spill incident in 1983 (the area has not been remediated). Three surface soil samples will be collected from this area.



TABLE 2  
SAMPLING STRATEGY  
FOR THE RFA SAMPLING VISIT  
AT  
CHECKPOINT SYSTEMS OF PUERTO RICO

<u>Locations to be Sampled</u>	<u>Sample Medium</u>	<u>Rationale for Sampling</u>	<u>Number of Points to be Sampled</u>	<u>Sampling Method</u>	<u>Depths/Types<sup>a</sup></u>	<u>Selected Analytes<sup>b</sup></u>	<u>Comments</u>
1. Groundwater Monitoring Wells	Groundwater	To verify results from previous sampling episodes	4	Teflon Bailers	Grab	CLP target compound list metals, volatile and semi-volatile organics, pH	
2. Empty Drum Storage Area	Surface Soil	To determine if hazardous constituents have been released	1	Stainless Steel Scoop	0 - 1'	CLP target compound list metals	Soil staining was apparent during VSI
3. Scrubber Water Tank Area	Surface Soil	To determine if hazardous constituents have been released	1	Stainless Steel Scoop	0 - 1'	CLP target compound list metals, volatile and semi-volatile organics, pH	Soil staining was apparent during VSI
4. Former Lagoon C	Surface and Subsurface Soil	To determine if hazardous constituents are present from previous use of lagoon	7	Stainless Steel Auger	Surface to 3' (field discretion)	CLP target compound list metals, volatile and semi-volatile organics, pH	
5. Spill Overflow Area (Outside Facility Boundary)	Surface Soil	To determine if hazardous constituents are present from past spill incident (lagoon overflow)	3	Stainless Steel Scoop	0 - 1'	CLP target compound list metals, volatile and semi-volatile organics, pH	
6. Acid Storage Area	Surface Soil	To determine if hazardous constituents have been released	1	Stainless Steel Scoop	0 - 1'	CLP target compound list metals	Soil staining apparent during VSI
7. Drainage Area from Scrubber and Scrubber Water Tank	Surface Soil	To determine if hazardous constituents have been released	2	Stainless Steel Scoop	0 - 1'	CLP target compound list metals, volatile and semi-volatile organics, pH	Obvious drainage area



TABLE 2 (continued)  
 SAMPLING STRATEGY  
 FOR THE RFA SAMPLING VISIT  
 AT  
 CHECKPOINT SYSTEMS OF PUERTO RICO

<u>Locations to be Sampled</u>	<u>Sample Medium</u>	<u>Rationale for Sampling</u>	<u>Number of Points to be Sampled</u>	<u>Sampling Method</u>	<u>Depths/ Types<sup>a</sup></u>	<u>Selected Analytes<sup>b</sup></u>	<u>Comments</u>
Duplicate	Surface Soil	To determine if hazardous constituents have been released	1	Stainless Steel Scoop	0 - 1'	CLP target compound list metals, volatile and semi-volatile organics, pH	Obvious drainage area
8. Aluminum Dumpster Storage Area	Surface Soil	To determine if hazardous constituents have been released	1	Stainless Steel Scoop	0 - 1'	CLP target compound list metals, volatile and semi-volatile organics	Aluminum shavings were present on the soil during VSI - may be coated with adhesives containing organics
9. Background	Surface Soil	Comparison Samples	2	Stainless Steel Scoop	0-1'	CLP target compound list metals, volatile and semi-volatile organics	
10. Equipment Blanks	Water	QC Samples	3	Bailer, Scoop Auger	Grab	CLP target compound list metals, volatile and semi-volatile organics	
11. Trip Blanks	Water	QC Samples	1	N/A	Grab	CLP target compound list metals, volatile and semi-volatile organics	

<sup>a</sup> See Table 3 for preservation methods, containers and holding times.

<sup>b</sup> Samples will be analyzed according to standard Contract Laboratory Program (CLP) protocols in force 7-87 (inorganics) and 10-86 with revisions (organics).



6. Acid Storage Area

This unit is an area where drums of raw materials (acids) are stored prior to use. This area showed evidence of past spills. One surface soil sample will be collected from this area.

7. Drainage Area from Scrubber and Scrubber Water Tank

This unit is a swale area which receives drainage from the scrubber water tank area, process chemical (acid and caustic) storage area and the acid storage area. Two surface soil samples will be collected from this area.

8. Aluminum Dumpster Storage Area

This unit is a dumpster used to store scrap aluminum. During the VSI, evidence of waste overflow was observed. One surface soil sample will be collected from the area surrounding this unit.

Presently, there are no factors identified which might influence the sequence by which identified locations are sampled, or establish a hierarchy of sampling locations. The collection of samples will be based on the judgment of the sampling team in consideration of the most efficient and effective routes.

4.1.1 Identification of Sampling Points

The sampling locations listed above are areas where sampling has been determined to be warranted. Specific sampling points within each sampling area will be selected during the SV based on field observations of soil conditions, topography, or any visual evidence of contamination or likely routes of waste migration.

4.1.2 Sampling Media

At present, it is expected that the media from which samples will be collected include soil and groundwater.



#### 4.1.3 Sampling Density

The sampling density is delineated in Table 2. The field team, in conjunction with the EPA Technical Monitor or representative on site, may determine that an expanded sampling density is necessary at certain locations based on in-field observations. The equipment carried by the sampling team will therefore include provisions for sampling at increased sampling densities.

#### 4.1.4 Sampling Depth

Surface soils will be sampled at each location from a depth between zero and one foot. This depth has been selected to determine if surface runoff of hazardous constituents has occurred. The exact depth of the soil samples may vary because of soil conditions, or visible contamination present. If, during the SV, field observations warrant collection of subsurface samples, subsurface soil collection may be conducted according to procedures outlined in this document.

#### 4.1.5 Location of Background Sampling Areas

Two background soil samples will be collected from areas of the Checkpoint Systems facility that have been determined to be free of contamination. The depths of the background soil samples will be from zero to one foot as delineated in Table 2.

#### 4.2 Analytical Determinations

This section describes the choice of parameter(s) for analysis and the special preparation for sampling needed in consideration of the wastes being managed at the facility. All samples will be analyzed for volatile and semi-volatile organics, and/or CLP target compound list metals as delineated in Table 2. Field pH testing will be performed for all samples.



#### 4.2.1 Choice of Parameters for Analysis

The wastes being managed at this facility include aluminum chloride and ferrous chloride and wastewater from the vent scrubber system on the etching plate baths. Muriatic acid, adhesive glue and trichloroethane (a solvent used in conjunction with adhesive application) are also being managed.

#### 4.2.2 Special Presampling Preparation

There are no unique conditions at this facility that warrant special presampling preparation for the RFA SV.



## 5.0 SAMPLING PROCEDURES

The sampling methodologies discussed in this document cover the media of interest (soil and groundwater) at the Checkpoint Systems facility. These methodologies have been selected on the basis of practicality, economics, representativeness, comparability with analytical considerations, and safety. In addition to specific sampling procedures, quality control procedures specific to the sampling medium are included. Quality assurance procedures applicable to all sampling media (e.g., sample handling and transportation, chain-of-custody procedures, and decontamination), are presented in Section 6.0. All sampling methods and materials address the needs and concerns that arise during SVs. The references that were used to prepare this section include but are not limited to: Characterization of Hazardous Waste Sites, A Methods Manual, Volume 2, Available Sampling Methods, EPA 600/4-84-076, December 1984; and, Test Methods for Evaluating Solid Waste: Chemical/Physical Methods, EPA SW-846, July 1982. Groundwater sampling was prepared with reference to RCRA Groundwater Monitoring Technical Enforcement Guidance Document, Chapter 4: Sampling and Analysis, U.S. EPA, March 7, 1986.

The sampling media that will be addressed during the Checkpoint Systems facility SV include soil and groundwater.

### 5.1 Soil Sampling

Soil samples at the Checkpoint Systems facility will be collected using a sampling kit composed of equipment capable of operating in the specific soil conditions expected to be encountered at this site. This equipment kit includes bucket auger samplers and tools (scoops and knives) specifically designed to facilitate sampling in different soil textures and to facilitate sample transfer. Hand-operated sampling equipment will be used to obtain samples at this facility. All sampling equipment will be constructed of stainless, Cr-Mo steel, or other materials which do not compromise analytical integrity.



In situations where biased conditions (e.g. discolored soil, dead vegetation) are not apparent, soil sampling sites may be identified following collection of a series of exploratory soil samples from within the general sampling location. The field team leader in conjunction with the EPA Technical Monitor, or EPA representative present on-site, will visually inspect the exploratory soil samples to determine the exact soil sampling depths to be used for laboratory analysis. Once this determination has been made, soil samples will be collected as described below for standard soil sampling procedures.

Surface soil samples are planned for the Checkpoint Systems SV. However, if field observations warrant the collection of subsurface soils, a bucket auger will be used as described below for subsurface sampling procedures.

Detailed soil sample information will be collected during the sampling operation. The information recorded will include depth of sample, description of sample including texture of soils, soil horizons, discolorations, and any odors. This information will be recorded in the field logbook.

#### 5.1.1 Surface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNu to determine the potential for hazardous conditions or toxic effects on workers.
2. Using a stainless steel trowel, clear the area to be sampled of any surface debris or cover material.
3. Begin collecting soil sample using a pre-cleaned, stainless steel scoop. Collect VOA samples directly from the first scoops and place into appropriate VOA vials. Use stainless steel spatula or knife only to pack soil.



4. Place the remaining sample into a glass or stainless steel pan and homogenize\* thoroughly. Place the sample into the appropriate sample container(s).
5. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. However, they must be cooled to 4°C.
6. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters.
7. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice.
8. Refill the hole from which the sample was collected with the remaining excavated soil.
9. Complete all chain-of-custody documents.
10. Record sample information in the field logbook.

#### 5.1.2 Subsurface Soil Sampling Procedures

1. Monitor the air adjacent to the sampling location with an HNu to determine the potential for hazardous conditions or toxic effects on workers.
2. Attach the pre-cleaned auger bit to a drill rod extension and further attach the "T" handle to the drill rod.
3. With a stainless steel trowel, clear the area to be sampled of any surface debris or cover material.

\*Homogenize - mix contents of sampler and/or individual grabs composing a sample in order to minimize bias of sample representativeness introduced by the stratification of constituents within the sample. To homogenize a sample of soil/sediment matrix, first remove any rocks, twigs, leaves and other debris if they are not part of the sample. The soil/sediment is removed from the sampling device and placed into a glass or stainless steel pan. The sample is then thoroughly mixed using a stainless steel spoon. The sample should be scraped from the sides, corners and bottom of the pan, rolled to the middle of the pan and initially mixed. The sample should then be quartered and moved to the four corners of the pan. Each quarter is to be mixed individually and then rolled to the center of the container and the entire sample mixed again.



4. Begin drilling, periodically removing accumulated soils to prevent accidentally brushing loose material back down the borehole when removing the auger or adding drill rods.
5. After reaching the desired depth, slowly and carefully remove the auger from the boring.
6. Decontaminate the auger bit or remove it and attach a pre-cleaned auger bit.
7. Place the auger into the hole and collect the sample.
8. Remove the sample from the auger with a pre-cleaned stainless knife or scoop. Collect VOA samples directly from the first soil collected and place into appropriate VOA vials. Use a stainless steel spatula or knife only to pack soil. Place the remaining sample into a glass or stainless steel pan and homogenize as described in Section 5.1.1. Place the sample into the appropriate sample container(s).
9. Check that a teflon liner is present in the cap, if required. Secure the cap tightly. The chemical preservation of solids is not generally recommended. However, they must be cooled to 4°C.
10. Label the sample bottle with the appropriate sample tag. Be sure to label the tag carefully and clearly, addressing all categories and parameters.
11. Wrap each sample container in a clean plastic bag and place in a clean plastic cooler with ice.
12. Refill the hole from which the sample was collected with the remaining excavated soil.
13. Complete all chain-of-custody documents.
14. Record sample information in the field logbook.

#### 5.1.3 Soil Sampling Quality Control

1. Detailed soil information will be collected during the sampling operation. The information recorded will include: depth of sample, description of the sample including texture of soils, soil horizons, discolorations, and any odors. This information will be recorded in the field logbook.
2. Each sample area and sampling activities will be photographed.



3. All personnel participating in the soil sampling will have training and experience in proper sampling procedures, documentation, and safety, specific to the RFA program.

## 5.2 Groundwater Sampling

### 5.2.1 Groundwater Sampling Procedures

1. Place a plastic dropcloth around the well to prevent sampling equipment and rope from contacting the ground.
2. Monitor the air adjacent to the well cap using an HNU, to determine the potential for hazardous conditions or toxic effects on workers.
3. Inspect the area surrounding the well casing and record any stick-up.
4. Monitor the air in the wellhead for organic vapors (HNU meter), and record the measurements.
5. Using an electric sounding instrument, measure the depth to water and to the bottom of the well. As the electric sounding instrument is being removed from the well, decontaminate it by rinsing with distilled/deionized water.
6. Utilizing the measurements obtained in step 4, calculate the fluid volume in the casing.
7. If wells to be sampled have dedicated bailers, each well will be purged using each well's dedicated bailer.
8. If each well does not have a dedicated bailer, the following procedure will be used to purge each well:
  - o Premeasure a length of new cotton rope from a roll. The rope should be of sufficient length to allow for water-level drawdown during sampling. The roll of rope will be protected from contamination at all times by keeping it wrapped in new aluminum foil.
  - o Select a new or decontaminated teflon bailer. Check the operation of check valve assemblies to confirm free operation.
  - o Attach the bailer to the cotton rope.
  - o Lower the bailer slowly until it contacts the water surface. Allow the bailer to sink and fill with water.



- o Slowly raise the bailer to the surface. Do not allow the bailer line to contact the ground or the side of the well.
  - o Open the bottom emptying device to allow a slow discharge into a suitably sized receptable.
  - o Measure the pH, temperature and conductivity of the purge water.
  - o Observe and record any color, odor or turbuity of the purged water, purge a minimum of three casing volumes.
  - o Note: prior to SV, arrange with the facility for an acceptable means to dispose of the purged well water (e.g., industrial storm sewer, etc.)
  - o Wells will be sampled within 3 hours of purging, assuming adequate recharge has occurred.
9. Select a new teflon bailer. Check the operation of check valve assemblies to confirm free operation.
  10. Premeasure a length of new cotton rope and attach it to the bailer. The rope should be of sufficient length to allow for water-level drawdown during sampling.
  11. Lower bailer slowly until it contacts the water surface.
  12. Allow bailer to sink and fill with minimal surface disturbance to minimize degassing of water.
  13. Slowly raise bailer to surface. Allow loops of bailer rope to fall into a bucket lined with new aluminum foil.
  14. Open bottom emptying device to allow slow discharge and ensure the water flows gently down the side of the sample bottle with minimal entry turbulence. Measurements of pH, temperature, specific conductance, and turbidity should be obtained from the first sample.
  15. Repeat above steps as needed to acquire a sufficient sample volume to fill all containers.
  16. Samples should be collected and containerized in the order of the parameters' volatilization sensitivity. The following table lists the preferred collection order for the groundwater parameters.



ORDER OF PREFERRED SAMPLE COLLECTION

1. Volatile organics (VOA) - Duplicate
  2. Extractable organics
  3. Total metals
- 
17. Special care should be taken in transferring water from the bailer to sample containers so that the sample is not aerated. This is especially important for volatile compounds, but is also a concern for metal samples so that oxidation is avoided.
  18. Fill sample bottles leaving sufficient headspace for volume expansion during aircraft transport and preservation. An exception to this is the iso-ml vial which must be filled completely. Preservation will be as described in Section 6.5. A third VOA vial will be used to aliquot necessary HCL preservative to a pH less than 2. Make sure that a Teflon-liner is present in the cap if required. Secure the cap tightly.
  19. Ensure that the sampling container is decontaminated prior to further handling (see Section 6.3, Sampling Quality Assurance).
  20. Label the sample bottle with an appropriate tag. Be sure to complete the tag with all necessary information. Use indelible ink. Complete chain-of-custody documents and field logbook.
  21. Allow the sample collection system to drain and then disassemble.

5.2.2 Groundwater Sampling Quality Control

1. Teflon bailers are amenable to all subsequent analytical determinations and will be used.
2. All quality assurance procedures defined in Section 6.0 which are applicable to groundwater sampling will be implemented.
3. The recording of any color, odor, or turbidity in purge water and/or groundwater samples will be used to substantiate analytical determinations. Analytical results which conflict with related observations warrant resampling of the well.
4. Duplicate groundwater samples will be collected for all samples schedule for volatile organic analysis.



5. For the purposes of the RFA, SV, an equipment blank will be collected to address groundwater sampling QC.
6. All personnel participating in groundwater sampling will have training and experience in proper sampling procedures, documentation, and safety.
7. Nitrile gloves will be worn throughout the groundwater sampling process to ensure health and safety and analytical integrity.
8. Groundwater samples will be preserved according to Section 6.5.



## 6.0 SAMPLING QUALITY ASSURANCE

The purpose of the SV is to support a determination of release potential associated with specific SWMUs and other areas of concern. The results of the SV are intended to support decisions regarding the need for further actions at the facility. The results are not intended to represent a detailed characterization of a release of hazardous constituents at the facility or to lead to a statistical inference. The data generated will provide a "snapshot" of the condition of the media sampled at the time of sampling. Data will not be generated over an extended time period to show variations due to seasonal or other factors. Samples will either be collected from locations where the likelihood of a release cannot be determined from the PR/VSI, or will be collected to provide additional site-specific information for EPA.

Procedures for field sampling must consider data quality objectives, the field instrumentation and testing, decontamination and disposal, sampling blanks, sample preservation and handling, recordkeeping, documentation, transportation, presentation of data, and interpretation of results.

### 6.1 Data Quality Objectives

The data quality objectives for the RFA SV are defined in terms of accuracy, precision, representativeness, completeness, and comparability of data. These objectives are developed through two phases: (1) the field sampling visit phase, and (2) the laboratory analysis phase.

#### 6.1.1 Accuracy

Accuracy is defined as how closely observed values conform to true values. Therefore, performance evaluation samples will be used to monitor accuracy. Performance evaluation samples will consist of blanks and laboratory-prepared spiked samples for the analyte(s) being investigated. These samples will be prepared on a waste specific basis to mimic the expected



composition of the environmental samples as closely as possible. The accuracy objectives for quantitative analysis will be expressed in terms of percent recovery of analytes comprising the performance evaluation samples.

Recoveries for the performance evaluation samples must fall within the ranges of recovery set forth in the Contract Laboratory Program manual. If recovery falls outside of this range, the analysis will be repeated. If recoveries are still out of this range, analyses must be terminated until the problem is identified and corrected or a reasonable explanation provided. Otherwise, all samples associated with the noncompliance performance evaluation sample must be reanalyzed. Laboratory data will be plotted on control charts to monitor analytical accuracy.

#### 6.1.2 Precision

Precision measures the replicability and repeatability of results obtained from analyzing samples. Duplicate field samples will be collected and precision monitoring will be employed by the analytical laboratory. Analytical precision will be monitored using results from duplicate surrogate and matrix spikes. Laboratory precision goals for the various surrogate compound fractions will be developed using control charts, and expressed as relative percent difference (RPD).

#### 6.1.3 Representativeness

The representativeness of samples collected during the RFA SV will be ensured in two ways. First, all field sampling will be done as outlined in the section referring to specific sampling procedures. Any modifications to these procedures will be recorded in the field logbook. All sampling procedures will be in accordance with established EPA guidelines and procedures outlined in this document. These guidelines and procedures have been



developed to promote consistency in environmental sampling efforts, to help ensure that proper sampling and sample handling procedures are followed, and proper equipment is used.

In addition, facility background information will be evaluated to determine the potential of a release from the SWMUs and other areas of concern located on-site. Before sampling activities are undertaken, the RFA, PR/VSI reports, and any additional pertinent information will be thoroughly evaluated to identify the following:

1. The likelihood of release from each of the facility SWMUs;
2. Past performance records (e.g., compliance files, inspection reports, NPDES data);
3. Sensitive areas (e.g., toe slopes, depositional areas, discolored soil);
4. The design and construction of groundwater monitoring wells or other sampling sources; and
5. The existence of sampling constraints.

Consideration of this information in the sampling effort will aid in collecting RFA samples that are representative of the facility being assessed.

#### 6.1.4 Completeness

Completeness for the RFA SV will be monitored by qualitative and quantitative means. A qualitative assessment will be made by comparing the results of the PR/VSI report and SV with the objectives and procedures for field sampling that have been developed for the RFA program. This assessment will determine, on a qualitative level, which objectives are met and which are not. Ultimately, the regulatory agency will determine completeness (i.e., whether additional samples need to be collected).



### 6.1.5 Comparability

Data will be generated under the RFA SV based on established EPA sampling guidelines. The protocols used in the collection of field samples involving equipment, preparation, preservation, handling, reporting, chain-of-custody, and documentation will ensure comparability with other EPA field sampling programs. Site-specific sampling will be planned and conducted in accordance with the general sampling guidelines developed for RFAs, including input and approval from the regulatory agency.

### 6.2 Field Instrumentation and Testing

In the event that portable instrumentation and/or analysis kits are brought on-site to provide immediate field testing, the QA measures that are employed will account for the conditions which may influence operating procedures, and hence, data quality. Therefore, standard QA procedures that are utilized for field testing involve the following:

Documentation of Sampling Site - The location and prevailing conditions of a sampling site may affect the analytical results obtained during field testing. For example, the terrain in which a field sampling point is located, or the existence of permanent structures/processes located adjacent to field sampling sites may impact analytical results. In addition, daily weather patterns (e.g., windy conditions), and seasonal trends (e.g., operating temperature) can impact analytical results. Therefore, documentation of the sampling site location and condition is warranted. The location of all sampling sites will be documented (e.g., benchmarks, photographs) in the sampling logbook, and prevailing conditions will be recorded and further verified (whenever possible) through photography.

Sampling/Analytical Methodology - The portable field kits used to provide field analytical results must be compatible with the conditions of the required sampling event. All probes, collection devices, and storage containers that are included as part of a specific field analysis kit will be evaluated to ensure that site-specific conditions or contaminants do not impact the analytical results. The field methodologies will be assessed for any additives/preservatives which could impact the analytical results.



Instrumentation - Only those analytical instruments that are recognized as field portable will be used for performing field analyses. Manufacturer's instructions concerning specific calibration and standardization techniques and preventative and remedial maintenance measures will be utilized. A copy of the calibration procedures will be available in the field for quick reference. Equipment will be calibrated in the field prior to use and during the SV. An equipment calibration record will be maintained in the field logbook. This record will include details on every field calibration technique which is utilized. At a minimum, these details will include:

1. Equipment type and brand name;
2. Equipment identification number;
3. Initial reading before calibration;
4. Final reading after calibration (as an example, for equipment such as pH meters, record the pH of the buffer used for single point calibration and readings on at least two other buffers); and
5. Air temperature (a 5 to 10 degree change in ambient air temperature from that of initial calibration is reason for recalibration of some instruments).

The HNu photoionization meter will be calibrated once according to manufacturer's instructions, in the laboratory prior to shipment. The HNu will be zeroed to background prior to each day of field activities.

### 6.3 Decontamination and Disposal

All equipment used in the site sampling effort will be initially decontaminated by the laboratory and will be ready for use prior to site entry. The decontaminated equipment will be packaged to protect it from exposure. All equipment will be wrapped in aluminum foil with the larger items wrapped with an additional plastic bag. A label stating the level of decontamination, date of decontamination, and initials of individual certifying decontamination will be attached to the protective package in such a way that the label will not be torn during unpackaging. A piece of equipment in a package with a torn label will not be used for sampling and will be considered contaminated. In order to prevent contamination of sampling equipment prior to use, a clean, dedicated area (e.g., pickup truck, plastic sheet) will be established at each sampling location to prevent contaminated media from coming in contact with any sampling tools or equipment.



(1)

Except for the soil auger and electronic sounding instrument, dedicated sample collection equipment will be used for the Checkpoint SV. All decontamination and subsequent use of decontaminated equipment will be documented in the field logbook. The following procedures will be used when decontamination is necessary.

#### 6.3.1 Equipment Decontamination

All sampling equipment and associated equipment (e.g. scoops, knives, bowls, etc.) will be decontaminated in the laboratory prior to shipment and will be dedicated to each sample location. However, if field decontamination of equipment becomes necessary, it will be accomplished according to the following procedures:

1. Scrub equipment with a nonphosphate detergent wash using a soft bristle brush to remove any particulate matter or surface film;
2. Rinse equipment thoroughly (3 to 5 times) with tap water;
3. Rinse equipment once with a 10 percent nitric acid solution;
4. Rinse equipment thoroughly with tap water;
5. Rinse equipment once with methanol;
6. Rinse equipment once with hexane;
7. Rinse equipment thoroughly with reagent grade (analyte-free) deionized/distilled water;
8. Allow to air dry thoroughly; and
9. Wrap in aluminum foil.

The following procedures will be used to decontaminate safety equipment such as respirators and boots which are susceptible to degradation by solvent rinsing.

1. Brush off loose dirt with soft bristle brush or cloth;

(1) Equipment which is only used once during a sampling event. This equipment is returned to home base for decontamination, prior to reuse.



2. Rinse thoroughly with tap water;
3. Wash in nonphosphate detergent in warm water;
4. Rinse thoroughly with tap water;
5. Rinse thoroughly with reagent grade distilled/deionized water;
6. Air dry in dust free environment; keep articles out of the sun;
7. Store in plastic bags.

Decontamination of small sampling tools, such as soil scoops, knives and containers, is not required if the equipment is properly disposed of after use. Disposable sampling tools and waste products from field decontamination, such as waste rinse water and waste solvent, must be properly disposed of on-site in accordance with the disposal procedures of the facility or must be packaged for off-site disposal.

#### 6.3.2 Disposal of Contaminants

Prior to the SV, the owner/operator will be contacted to establish on-site treatment/disposal options for waste generated during the SV. Contaminated disposable sampling equipment or tools (e.g., disposable scoops, gloves) and aqueous washdown solutions will be disposed of on-site in accordance with the disposal procedures of the facility. Contaminated equipment that is not amenable to on-site decontamination (e.g., clothing) will be effectively contained, removed from the site, and subsequently properly decontaminated/disposed.

#### 6.4 Sample Blanks

In order to verify that the sample collection and handling process has not affected the quality of the samples, trip and equipment/field sample blanks will be utilized. The blanks will be submitted as other field samples with no obvious marks or labels.



#### 6.4.1 Trip Blanks

Trip blanks are used to determine if contamination is introduced from the sample containers during transport. Trip blanks will be prepared by an analytical laboratory using water which is known to be free of purgeable organic compounds, and will be sent to the field sampling site. Trip blanks for purgeable organic compounds will be utilized at a frequency of one in every twenty samples.

#### 6.4.2 Equipment/Field Blanks

Equipment blanks will determine if contamination is introduced from the sample collection equipment following decontamination practices. Equipment blanks will be prepared by the field sampling team by filling the sample collection device with deionized or distilled analyte-free water (see Section 6.4.3) of known high purity (or passing this water through or over the sample collection device) and transferring this water to a sample container. After standardized decontamination procedures are conducted, one equipment blank will be prepared for each type of sample collection device used during the sampling visit (scoop, auger). The knife, bowl and pan used in mixing and transferring the sample will be combined into one blank. Appropriate aliquots will be prepared for each analytical parameter group under investigation.

These samples will be prepared in the field prior to sampling and will additionally serve as field blanks to determine if contamination is introduced from sample collection activities or the prevailing sampling environment.

#### 6.4.3 Analyte-free Water Requirements

Region II requires that the distilled, deionized water used in preparation of trip and field blanks be analyte-free. Analyte-free means that the water will conform to the CLP contract detection limit. Exceptions exist for common



laboratory contaminants including three volatiles: methylene chloride, acetone and 2-butanone, and phthalates in the semi-volatile fraction. Concentrations less than 3-times the CLP contract detection limit are acceptable for these compounds.

The contractor can document the quality of the water used with submittal of laboratory certification for each source of distilled, deionized water used in trip/field blank preparation. If laboratory certification does not meet the above criteria, an alternative source will be used. If laboratory certification is not available, verification of water quality will be documented through collection of a reagent blank which will be analyzed for the full suite of TCL compounds (volatiles, semi-volatiles, pesticides/PCBs and inorganics). Reagent blanks are required for each water source used during a sampling event up to five days in duration. If sampling extends into a subsequent week(s), reagent blanks are required for each source, each week.

For the Checkpoint facility SV, distilled, deionized analyte-free water will be obtained from a certified laboratory. Prior to shipment of this water, it will be analyzed by the laboratory and a copy of the analytical data will be provided to the SV team.

#### 6.5 Sample Preservation and Handling

Table 3 lists the containers and specific handling and preservation techniques to be used for water and soil samples collected at the Checkpoint Systems facility.

##### 6.5.1 Special Considerations

Since many of the constituents and parameters that are included in an RFA investigation are not stable, special handling considerations, including sample preservation, are required. For example, physical and chemical changes may be brought about by storage and aeration. In addition, the presence of



Table 3

Preservation and Handling Procedures for  
Samples Collected at the Checkpoint Systems Facility

Parameter	No. and Type of Container <sup>a</sup> (per sample)	Preservation	Holding Time <sup>b</sup>
<u>WATER (4 groundwater samples and 4 blanks)</u>			
<u>CLP Target Compound List Metals</u>			
Total	1 liter, P	HNO <sub>3</sub> to pH 2	6 months, except Hg—28 days
<u>Priority Pollutant - Organics</u>			
Extractables base/neutrals and acids	1-4 liter, G (amber colored), Teflon- lined cap	Cool, 4°C	7 days until extraction, 40 days after extraction
Purgeables <sup>C</sup> (VOA)	2-40 ml, G Teflon- lined cap	Cool, 4°C HCL to pH 2	14 days
<u>SOIL (18 surface and subsurface)</u>			
<u>CLP Target Compound List Metals</u>			
Total	1-8 ounce, G	Cool, 4°C	6 months
<u>Priority Pollutant - Organics</u>			
Extractables base/neutrals and acids	1-8 ounce, G	Cool, 4°C	7 days until extraction, 40 days analyze



Table 3

Preservation and Handling Procedures for  
Samples Collected at the Checkpoint Systems Facility  
(Continued)

Parameter	No. and Type of Container <sup>a</sup> (per sample)	Preservation	Holding Time <sup>b</sup>
<u>SOIL</u> (con't)			
Purgeables <sup>c</sup> (VOA)	2-40 ml, G	Cool, 4°C	7 days

<sup>a</sup> P = Polyethylene, G = Glass

<sup>b</sup> The holding times are those listed in Technical Additions to Methods for Chemical Analysis of Water and Wastes, EPA-600/4-82-055, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA-600/4-82-057 (water) and Generic Field Operations Plan for RFA Sampling Visits, October, 1988, EPA Contract No. 68-01-7250; Work Assignment No. 49-2K00 (soil). For purposes of data validation, holding times are defined from the time of sample collection to time of sample analysis/extraction.

<sup>c</sup> Vial must be full and free of headspace.



suspended matter or turbidity and the method chosen for its removal must be considered to ensure that analytical results represent the actual sample composition. Preservation methods are generally limited to pH control, refrigeration, and chemical additions. Table 3 identifies the handling and preservation techniques applicable for specific analytical groups. Special handling considerations for aqueous samples include the following:

Organics - Samples requiring analysis for organics will not be filtered. In order to negate losses of organic material onto the walls of the container, sample transfer from one container to another will be minimized. Samples collected for the analysis of total organic carbon (TOC) and total organic halogens (TOX) will be handled and analyzed as materials containing volatile organics. In order to minimize the possibility of volatilization of purgeable organics compounds, the 40 ml vials should be filled completely so that no headspace or air bubbles are present. However, as specified in the U.S. Department of Transportation Shipping Regulations, headspace should be left in all other containers. This allows room for sample volume expansion which is caused by the decreased air pressure encountered in cargo holds of aircraft. The septum closure in the 40 ml vials compensates for expansion. VOA samples will be preserved with HCL to a pH less than 2.

Inorganics - Particles (e.g., silt and clay) which may be present in water samples may sorb the various metal species to effectively lower dissolved metal concentrations. The following procedures will be conducted:

Total Metal Fraction

- o Transfer collected water sample to container;
- o Preserve using nitric acid to pH less than 2; and
- o Analyze for total metal(s).

Special handling considerations for soil samples are not required, other than removing them from the direct sunlight and refrigerating to 4°C.



## 6.6 Recordkeeping, Documentation, and Transportation

The locations from which samples are collected will be documented. In addition, all samples collected will be labeled in a clear and precise way for proper identification in the field and tracking in the laboratory. The documents used during the SV consist of the individualized sample labels, a field logbook, and a chain-of-custody/field tracking record. In order to ensure accountability, these documents will be appropriately cross-coded with a unique identifier. The following is a hypothetical example of such an identifier:

51729 - 09

where:

51729 - corresponds to the project code designated for the specific SV; and

09 - corresponds to the 9th sampling location visited during the course of the SV.

There will be no erasures permitted in any of the documents. Instead, all entries warranting correction will be stricken with a single line and accompanied by the date and initials of the sampling representative.

In order to preserve the integrity of the sample(s) from the time of collection until reception at the laboratory, sample seals will be used in conjunction with standardized sample transportation procedures.

All chain-of-custody, traffic report forms, sample labels and custody seals will be filled out completely, accurately, and legibly. All information needed to correctly and easily associate all QC samples with appropriate environmental samples will be part of the data validation deliverable package.

### 6.6.1 Documentation of Sampling Locations

Whenever samples are collected, the location from which the sample was taken will be verified. Photographs will be used to document sampling sites and to verify any written descriptions entered in the field logbook. If



photographs are not applicable to the situation, the method of triangulation will be used in conjunction with permanent structures or other benchmarks to document sampling locations.

#### 6.6.2 Field Logbook

The field logbook will contain all pertinent SV information, observations/information not included in the chain-of-custody/standardized field tracking form document and any deviations in protocol from the prescribed sampling plan. This information may include descriptions of the SWMU being sampled and any factors or conditions which might affect sampling procedures (prevailing weather, sampling terrain, etc.), and hence, subsequent analytical results. All routine measurements and observations that are derived (e.g., temperature, dissolved oxygen and pH) will be recorded in the field logbook, including, but not limited to, sampling blanks, static water depths, bore hole volumes, soil core descriptions, and pertinent colors and odors.

#### 6.6.3 Photographs

Photographs will be taken which indicate areas of potential release locations, and sampling activities. Photographs are important in documenting potential environmental problems and to document that sampling procedures were properly followed. Whenever samples are collected, photographs will be taken for each step in the process to verify and complement the written description in the field logbook. Photographs will be taken of each soil sampling location prior to disturbing the soil as well as once the sample is taken. In addition, one photograph will be taken of each soil sample. The following information must be written in the logbook whenever a photograph is taken:

1. Time, date, location, and, if appropriate, weather conditions;
2. Complete description or identification of the subject in the photograph and reason why the photograph was taken;



3. The sequential number of the photograph and film-roll number; and
4. Name of person taking photograph.

In addition, procedures which greatly aid in the interpretation of what each photograph depicts are to:

1. Prepare a site sketch in addition to the one used to depict sampling locations.
2. Enter on the sketch a notation for each photograph which consists of:
  - O Location of photographer for each photograph;
  - # Number of each photograph;
  - | Direction photographer was facing for each photograph (the absence of an arrow indicates that the camera was pointed down for that particular photograph).

To avoid possible confusion, the film developer should be instructed to not cut the rolls of photographs or negatives. Project personnel can then enter the information on the backs of the photographs before the rolls are separated into individual photographs or negatives.

#### 6.6.4 Chain-of-Custody/Field Tracking Record

To establish documentation necessary to track sample possession from the time of collection, a chain-of-custody record will be filled out and accompany any sample or sample group transported for laboratory analysis. A carbon copy of this document will be retained by the field sampling personnel. This form will then serve as the field tracking record or cross-reference to the specific analytical procedures requested for each sample on the chain-of-custody record. The record will contain the following information:

1. The sample identification number specific for each sample collected;
2. The date and time that each sample was collected;



3. The size and material of the sample container used for each collected sample;
4. The specific sample type (e.g., water, soil, air);
5. Applicable sample preservation;
6. Parameters requested for analysis;
7. Signature of person(s) involved in the chain of possession; and
8. Inclusive dates of possession.

The chain-of-custody record will be placed in a waterproof bag and taped to the underside of the lid of the ice chest being used for sample transportation. An updated, signed copy of the chain-of-custody record, completed by the receiving laboratory, will be requested by the field sampling team. An example of the chain-of-custody/field tracking record is provided as Figure 2.

Chain-of-custody of sample containers from the time of their cleaning or issuance will consist of:

1. All sample containers will be containers purchased from I-Chem Research.
2. Seals will be placed on both closures of all boxes of I-Chem containers.
3. A notation will be made in the field logbook concerning integrity of seals when a box is opened.
4. If a partial box of containers remains at the end of a sampling episode, the box will be resealed until needed.

#### 6.6.5 Sample Labels

A legible label providing the specific sample identification code will be affixed to each sample container. The labels will be sufficiently durable to remain legible even when wet and, in addition to the sample identification



FIGURE 2  
CHAIN OF CUSTODY RECORD

ENVIRONMENTAL PROTECTION AGENCY — REGION II  
Environmental Services Division  
EDISON, NEW JERSEY 08817

Name of Unit and Address:							
Sample Number	Number of Containers	Description of Samples					
Person Assuming Responsibility for Sample:						Time	Date
Sample Number	Relinquished By:	Received By:	Time	Date	Reason for Change of Custody		



code, will contain date of sample collection and the signature of the collector. Specific analytical services for each sample will be derived from the chain-of-custody report.

#### 6.6.6 Sample Seals

Sample seals will consist of narrow strips of adhesive material that will be used to demonstrate that no tampering has occurred. They are not intended for use on individual sample containers, but on the sample transport container(s) not possessing a lock.

#### 6.6.7 Sample Transportation

Samples transported off-site will be packaged for shipment in compliance with current Department of Transportation (DOT) and commercial carrier regulations. Samples will be placed in an ice chest by field personnel. Following collection, samples will be delivered to the laboratory as quickly as possible. In addition, the completed chain-of-custody records, laboratory analysis request forms, and any other shipping/sample documentation accompanying the shipment will be enclosed in a waterproof plastic bag and taped to the underside of the ice chest lid.

#### 6.7 Data Validation

All analytical data will be validated using the most current EPA Region II protocols.



## 7.0 HEALTH AND SAFETY PLAN

Consistent with the need for conducting the RFA SV in accordance with the stated Quality Assurance/Quality Control protocols is the need for the RFA SV to be conducted in accordance with accepted health and safety practices. The intent of the RFA SV health and safety plan is to ensure that the health and safety of the sampling team members are not threatened in any fashion by either site conditions or the conduct of the sampling program.

This health and safety plan consists of two sections: (1) a general overview of the A. T. Kearney team health and safety approach to any field site and (2) health and safety procedures specific to the individual site and applicable procedures for personnel performing sampling duties.

The basis for development of the site health and safety plan is A.T. Kearney's Safety and Health program and an evaluation of site-specific conditions as presented in the PR/VSI reports. The plan will provide at a minimum for the physiological fitness of the team's members, personal protective equipment (PPE) requirements, orientation, and emergency response procedures.

### 7.1 Health and Safety Plan Components

There are seven (7) "key" components to a site health and safety plan. They are:

- Project Information
- Personnel
- Site Evaluation
- Orientation
- Personal Protective Equipment
- Emergency Procedures
- Special Instructions



In addition to the stated "key" components, the nature of a sampling expedition entails several other considerations to be addressed in the development of a site health and safety plan. They are:

- Entry Objective(s)
- Control Procedures
- Work Zone Delineation
- Decontamination

#### 7.1.1 Project Information

This health and safety plan has been prepared as a critical component of an RFA SV Protocol for EPA Contract 68-01-7038, Work Assignment No. R02-01-54. The RFA SV is to be conducted at the Checkpoint Systems facility located in Ponce, Puerto Rico.

#### 7.1.2 Personnel

The personnel who will participate in the Checkpoint Systems RFA SV are listed in Section 2.0, Table 1. Table 1 provides each team member's name, affiliation, project title and a brief description of the responsibilities associated with their assigned role(s).

Each member of the project team has been selected based on his/her qualifications and experience in all aspects of field sampling techniques and procedures. Prior to project members visiting the site, the A. T. Kearney team Health and Safety Manager must review the Health and Safety Plan for adequacy and grant approval to each individual of the project team.

The minimum qualifications are:

- o Participation in the Occupational Health Monitoring program including a comprehensive medical examination by a competent occupational physician.



- o Successful completion of an extensive health and safety training course.
- o Instruction of personnel in the proper use of personal protective equipment (PPE) including fit testing of respirators.

#### 7.1.3 Site Safety and Health Evaluation

A brief description of the site, and its current and former operations is provided in Section 3.0, Site Background. Additional information is provided in Section 4.0, Sampling Criteria.

The SV protocol (Section 4.0) calls for sampling in the immediate vicinity of both inactive/closed and active solid waste management units (SWMUs). Thus, coordination of the sampling team's efforts with plant management is critical to the success of the sampling visit in general and the health and safety plan in particular. Of concern in the health and safety plan development is not only the hazardous waste or constituents at SWMUs that are the focus of the SV, but also plant operations that may present either physical and/or chemical hazards to members of the sampling team. This Health and Safety Plan has been developed consistent with accepted health and safety procedures the Checkpoint and flexible enough to accommodate any safety and health procedures mandated by plant management.

#### 7.1.4 Orientation

As previously stated, each field team member was selected based upon his/her qualifications and experience in field sampling techniques and procedures, as well as his/her medical fitness to wear personal protective equipment, including respiratory protection, and to work in potentially hazardous environments. Strategic and proper selection of personnel is a critical component in the success of the overall project, and the effectiveness of the project's health and safety plan.



While each team member will have a demonstrated familiarity with the operational techniques to be employed and the Quality Assurance/Quality Control protocols to be followed, each member will participate in an orientation session prior to commencing the SV. An outline of the training is as follows:

- Project Goal(s)/Objective(s)
- Safety and Health Requirements
- Quality Assurance/Quality Control
- Sampling Procedures

More specific information to be covered for each of the designated topics other than health and safety is provided elsewhere in this SV plan. Health and safety orientation will consist of the following:

- Verification by the Health and Safety Manager or team leader that each member is medically qualified to participate in this project.
- Verification by the field team leader that each member has the appropriate complement of personal protective equipment and has been trained in its use and care.
- Verification by the field team leader that each member has had an opportunity to review the health and safety plan and is familiar with procedures that must be exercised on-site.

#### 7.1.5 Personal Protective Equipment

The selective use of the appropriate personal protective equipment will afford the field team their primary physical means of protection against any potential hazards they may encounter in the conduct of this SV. Each field team member will be equipped consistent with Appendix II.

All SV activities will require at a minimum Level D personal protective equipment. Level D provides for the basic work uniform, and requires that foot, head, and eye protection conforming to applicable ANSI standards be worn. It affords a minimum level of protection, suitable for very limited field activities.



All field sampling activities will be conducted in a modified Level D category of PPE. This selection is predicated upon a review of site conditions described in the PR/VSI report; the nature of the proposed sampling activities; a review of the literature relative to the associated toxicity; routes of exposure; and recommended personal protective equipment for the compounds believed to have been previously managed as a hazardous waste at the Checkpoint Systems site.

The modified Level D equipment will be complimented with latex gloves (disposable) and a dual cartridge, air purifying half mask respirator, equipped with organic vapor/acid gas cartridges. The respirator will be carried at all times for escape purposes.

The use of the designated respiratory protection will be deemed optional except in the event that either plant standard operating procedure requires such equipment or that the air monitoring indicates elevated levels of VOCs are present.

Due to the increased physiological heat load that the personal protective equipment requirements will impose on field team members, each member must be aware of the potential for heat stress, particularly in a tropical climate such as that encountered in Puerto Rico.

#### 7.1.6 Emergency Response

Emergency response procedures will be existing procedures at the Checkpoint Systems facility. The field team leader will be responsible to ensure that each member of his team is briefed on these procedures. If in the professional opinion of the field team leader or the field QA/QC and the Site



Safety Officer, the existing facility procedures do not afford the sampling team adequate protection, it will be necessary to develop alternative procedures to address the identified deficiencies.

The sampling team will be equipped to be as self sufficient as possible. Such emergency response items as first aid supplies and a fire extinguisher will be available in the field vehicle utilized to transport the team and their equipment.

#### 7.1.7 Special Instructions

It is not anticipated that any special instructions will be necessary for this health and safety plan. Any applicable plant SOPs that do not correlate with any section of this plan, would be incorporated here. The field team leader or field QA/QC and safety and health officer will determine the need for any additions or special instructions once an initial reconnaissance of site conditions has been conducted.

#### 7.1.8 Entry Objectives

The entry objectives for this SV are stated in Section 1.0, Introduction and Section 4.0, Sampling Criteria.

#### 7.1.9 Control Procedures

Control procedures for this sampling effort will be predicated upon existing facility procedures.

#### 7.2 Work Zone Delineation

The intent of work zone delineation is to establish clear "corridors" through which workers pass either while entering or egressing contaminated areas. It ensures that workers are properly equipped when entering



contaminated areas and further attempts to eliminate the inadvertent contamination of previously noncontaminated areas.

Work zone delineation will be predicated upon existing facility procedures. With respect to each sampling location, quality control measures will be followed to ensure that field quality assurance objectives are met. The potential for field cross contamination will be minimized by establishing a procedure at each location to accomplish such tasks as staging decontaminated sampling equipment and PPE, establishment of the sampling area itself, temporary staging of contaminated equipment and establishment of a decontamination area.

#### 7.2.1 Decontamination

Decontamination of articles of PPE and sampling equipment serves the dual purpose of ensuring the health and safety of field team members and minimizing the potential for field cross contamination of samples. Decontamination for the purposes of quality assurance/quality control is described in Section 6. Decontamination for health and safety purposes will follow essentially the same principles as outlined in Section 6.0, but will focus on PPE removal and decontamination or disposal procedures and personal hygiene practices (i.e., showering, etc.).

#### 7.3 Appendices

The health and safety appendices are attached on the following pages.



APPENDIX IMEDICAL SURVEILLANCE PROGRAM

All A. T. Kearney team staff, who may be assigned project tasks involving field inspections, sampling or monitoring activities, are required to successfully complete a comprehensive multiphasic physical examination, prior to conducting field activities. In addition, periodic re-examination will also be required, at a minimum, on an annual basis or as otherwise directed by the examining physician. Termination examinations are also required when a program participant leaves the employ of the group. The protocol to be followed by the administering physician is as follows:

- Complete Medical/Occupational History
- Comprehensive Physical Examination
- Complete Blood Count (CBC) with Differential and Platelets
- SMAC 24 Chemistry Profile
- PolyChlorinated Biphenyls (PCB) Scan
- Red Blood Cell (RBC) Cholinesterase
- Chest X-Ray (Posteroanterior view)
- Pulmonary Function Test (spirometry)
- Electro-Cardiogram (EKG) - 12 lead resting
- Routine Urinalysis
- Audiometry
- Vision Screening



The examination is to be administered by or under the direction of a licensed, board certified occupational health physician. The final report must include the physician's opinion as to the examined individuals' fitness to wear respiratory protection equipment and other types of personal protective equipment.



APPENDIX IILEVELS OF PROTECTION

This Appendix outlines the commonly accepted components of the 5 levels of protection utilized in hazardous waste site investigations and remedial actions.

Level A

Level A protection (a fully encapsulating suit) is used when percutaneous hazards exist or when there is no known data that positively rule out percutaneous hazards. Since Level A protection is extremely physiologically and psychologically stressful, the decision to use this protection must be carefully considered. The following conditions suggest a need for Level A protection:

1. Confined facilities where probability of skin contact is high.
2. Sites containing known percutaneous hazards.
3. Sites with no established history to rule out percutaneous hazards.
4. Atmosphere immediately dangerous to life and health--skin absorption route.
5. Site exhibiting signs of acute mammalian toxicity (e.g., dead animals, human illnesses associated with past entry onto the site).
6. Sites at which sealed drums of unknown material must be opened.



The following items constitute Level A protection:

- o Open circuit, pressure-demand SCBA
- o Totally encapsulating suit
- o Gloves, inner (surgical type)
- o Gloves, outer, chemical protective
- o Boots, chemical protective, steel toe and shank
- o Radiation detector
- o Thermal-luminescent dose (TLD) badge
- o Communications

#### Level B

Level B protection is required when the highest level of respiratory protection is needed, but hazardous material exposure to the few unprotected areas of the body (i.e., the back of the neck) is unlikely.

Personal Protective Equipment for Level B includes:

- o Open circuit, pressure-demand SCBA
- o Chemical protective
  - Overalls and long-sleeved jacket
  - Coveralls
- o Gloves, inner (surgical type)
- o Gloves, outer, chemical protective
- o Boots, chemical protective, steel toe and shank
- o Radiation detector
- o TLD badge
- o Communications Optional



Level C

Level C protection is required when the level of respiratory protection is reasonably assumed not to be greater than the level of protection afforded by air purifying respirators, and hazardous material exposure to the few unprotected areas of the body (i.e., the back of the neck) is unlikely. Level C may require carrying an emergency escape respirator.

Personal Protective Equipment for Level C includes:

- o Full facepiece air-purifying respirator
- o Emergency escape respirator (carried, optional)
- o Chemical protective
  - Overalls and long-sleeved jacket, or
  - Coveralls
- o Gloves, inner (surgical type)
- o Gloves, outer, chemical protective
- o Boots, chemical protective, steel toe and shank
- o Radiation detector
- o TLD badge

Level D

Level D is the basic work uniform.

Personal Protective Equipment for Level D includes:

- o Coveralls
- o Safety boots/shoes
- o Safety glasses
- o Hard hat with optional faceshield
- o Radiation detector
- o TLD badge



Level E

Level E protection is used when radioactivity above 10mr/hr is observed or detected on a hazardous waste site. Procedure is to immediately evacuate to a safe distance (2mr/hr level). Radiological safety experts available through the ZPDM must be consulted to determine adequate safety and sampling equipment, protective gear, monitoring methods, handling procedures, and remedial options.

Personal Protective Equipment for Level E includes:

- o Coveralls
- o Air purifying respirator
- o Time limits on exposure
- o Appropriate dermal protection for type of radiation present
- o Radiation dosage monitoring



APPENDIX IIISTANDARD PERSONAL PROTECTIVE EQUIPMENT POLICY

This Appendix outlines A. T. Kearney's Standard Personal Protective Equipment Requirements to be followed in the execution of a VSI, SV or RI. It provides minimum guidelines only; the WAM or field team leader must exercise professional judgement as to the adequacy of the level of protection provided by these guidelines, relative to the known or potential exposures to the field team members at a given site.

At a minimum, field team members conducting a VSI, SV or RI will be equipped as follows:

Level D

- Cotton/cotton blend pants
- Cotton/cotton blend long sleeve shirt
- Steel toe boots/shoes of substantial construction. Neoprene or Nitrile gloves, steel toe boots may be worn for ease of decontamination. Disposable "nuke" boots may be worn over leather boots. All foot protection must conform with ANSI Z41-1983.
- Hard hat (ANSI Z89.1-1981)
- Safety glasses with side shields (ANSI Z87.1-1979)

In addition to the level D equipment, all field team members should be equipped with a field bag containing the following PPE:



- Half face piece, dual cartridge respirator, with a general selection of multipurpose cartridges and conform and be approved by the National Institute for Occupational Safety and Health and/or the Mine Safety and Health Administration (NIOSH/MSHA).
- Disposable Tyvek jump suit
- Disposable Polyethylene "nuke" boots
- Disposable Latex gloves
- Nitrile or Neoprene gloves
- Disposable ear plugs
- Duct tape (for securing pant legs ankle/wrist openings) if necessary
- Spare Parts Kit for respirator (optional)
- Pocket knife (optional)

NOTE: The WAM or field team leader will be issued the HNU-PID with the calibration kit and a small tool kit. Each team member is responsible for the care, maintenance and replenishment of the PPE issued to them. Common sense should prevail with respect to selection of personal clothing articles to be worn in the field. Women should not wear skirts, dresses, or nylons. High heeled, open toe/ankle shoes also should not be worn. Clothing should not be oversized or loose/floppy.



ANALISIS QUIMICOS

PRODUCTO : AGUA DESTILADA- CERTIFICADA

FECHA : MAR 26/10/89NO. LOTE : UAD 89-1RESULTADOS

1. Conductividad - ~~10 megohm-cm~~ 5 megohm-cm  
2. pH - 7  
3. Chloride - No opalescence was produced  
4. Sulfate - No turbidity was produced  
5. Ammonia - Meets the U.S.P. tests  
6. Calcium - No turbidity was produced  
7. Carbon Dioxide - The mixture remains clear  
8. Heavy Metals - Meets the U.S.P. tests  
9. Oxidizable Substances - the pink color does not completely disappear.  
10. Total Solids - Not more than 0.001%  
11. Copper - Not Detectable  
12. Silicate - Not Detectable  
13. Bacteriological Purity - Meets the requirements of U.S.P., CAP, ACS, ASTM and NCCLS.  
14. Inspeccion Física - Clear, odorless liquid, colorless

Carman J. Muñoz Concepción  
Supervisora Laboratorio

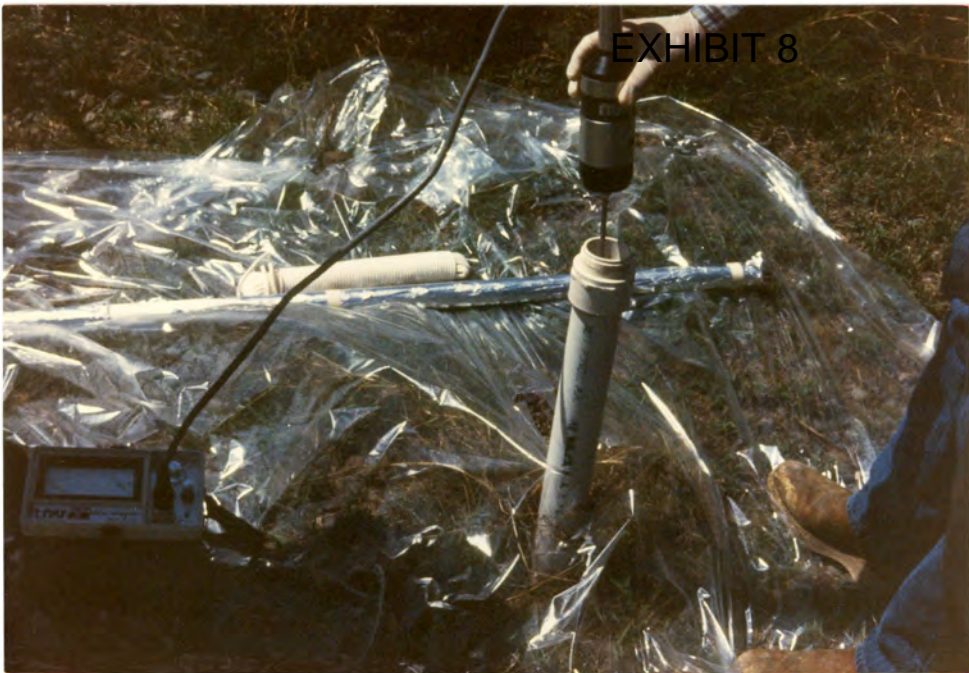
Samuel G. Díaz  
Jefe Laboratorio



**ATTACHMENT B**  
**ANALYTE-FREE WATER ANALYSIS**



EXHIBIT 8



1. View of air monitoring with well cap off at Monitoring Well 1.



## EXHIBIT 8



2. View looking southwest from MW-1.



## EXHIBIT 8



3. View looking southeast from MW-1.



## EXHIBIT 8



4. View of YSI meter measuring depth to water table at MW-1.





5. Decontamination of YSI meter after use at MW-1.



EXHIBIT 8



6. Collection of organics bailer blank sample (C001).



## EXHIBIT 8



7. Removal of purge water from Monitoring Well 1.



## EXHIBIT 8



8. Collection of VOA bailer blank sample (C001).



## EXHIBIT 8



9. Collection of inorganics bailer blank (C001).

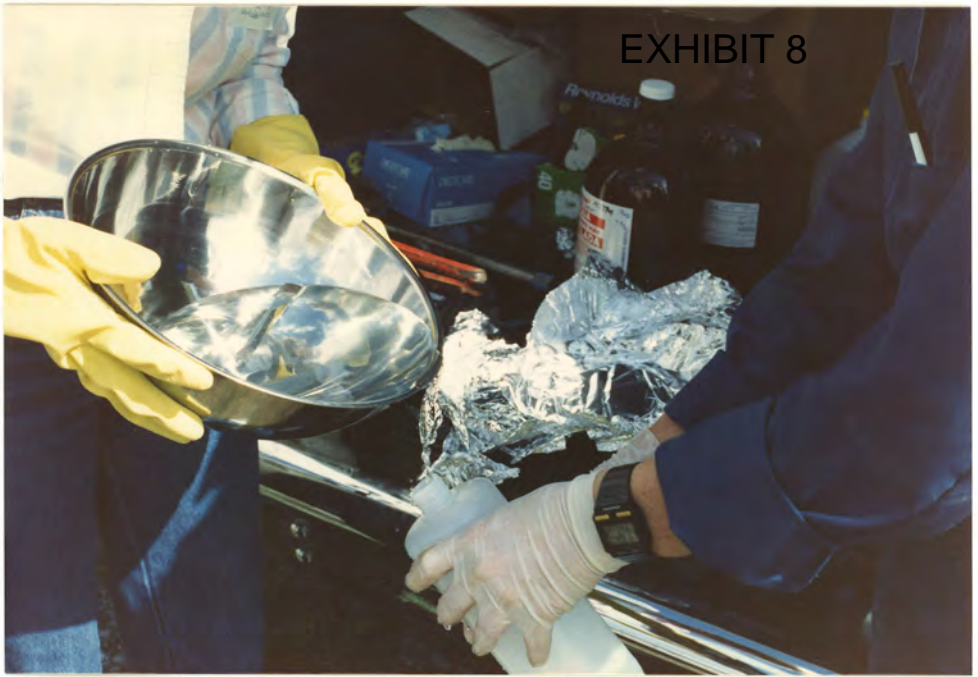


## EXHIBIT 8



10. View of collection of organics sample at MW-1 (C002).





11. Collection of inorganics bowl and knife blank (C003).



12. Collection of organics scoop blank (C005).





13. Removal of foil from rope prior to purging Monitoring Well 2.



14. View looking northeast from Monitoring Well 2.





15. View of purging looking southwest towards MW-2.



EXHIBIT 8



16. Close-up of purging activities at MW-2.





17. Removal of aluminum foil from teflon bailer at MW-2.



18. Removal of foil from rope for teflon bailer at MW-2.





19. Collection of organics sample at MW-2 (C004).



20. Close-up of surface soil sampling location at Drainage Area from Scrubber and Scrubber Water Tank prior to removal of surface layer of soil (C006).





21. View looking southwest from Drainage Area from Scrubber Water Tank towards Monitoring Well 2.



## EXHIBIT 8



22. Close-up of homogenizing surface soil sample from Drainage Area from Scrubber and Scrubber Water Tank after compositing and quartering sample (C006).





23. Close-up of hole used for surface soil sample collection at Drainage Area from Scrubber and Scrubber Water Tank (C006).





1. Former location of surface impoundments. Lagoons A (SWMU 1) and B (SWMU 2) (facing northeast).



2. Raw Acid Storage Area (Area of Concern 2) (in center background). The Scrubber Unit (SWMU 6) is in right foreground.





3. Typical monitoring well (MW-3).



4. Overflow spill area (Area of Concern 1). No visible signs of contamination from the May 9, 1983 incident were apparent.





7. Spillage at Scrubber Unit (SWMU 6) and Scrubber Water Tank (SWMU 5).





EXHIBIT 8

8. Scrubber Water Tank Drainage Area (SWMU 10).  
Note Scrubber Unit (SWMU 6) and Scrubber Water Tank (SWMU 5) in background and soil staining in foreground.



9. Scrubber Water Tank (SWMU 5).





10. Scrubber Unit (SWMU 6) in background and acid tank in Raw Acid Storage Area (Area of Concern 2) in foreground. Note soil staining.





11. Scrubber Water Tank Drainage Area (SWMU 10) (facing west). Note white tank in foreground is for collection of rainwater for use in processes.



12. Scrubber Water Tank Drainage Area (SWMU 10) (facing east).





13. Trench with grate to collect washwater from acid bath process. Trench drains to Scrubber Water Tank (SWMU 5) through a PVC pipe.



14. Acid fumes collectors (PVC pipes) from acid bath process. Fumes are directed to Scrubber Unit (SWMU 6).





15. Raw Acid Process Tank.



16. Empty Drum Storage Area (SWMU 8) (facing north).



## EXHIBIT 8



17. Former location of Lagoon C (SWMU 3) used as an experimental evaporation basin. Empty Drum Storage Area (SWMU 8) is in right background.



18. Empty Drum Storage Area (SWMU 8) (facing east). Note soil staining and stressed vegetation.



## EXHIBIT 8

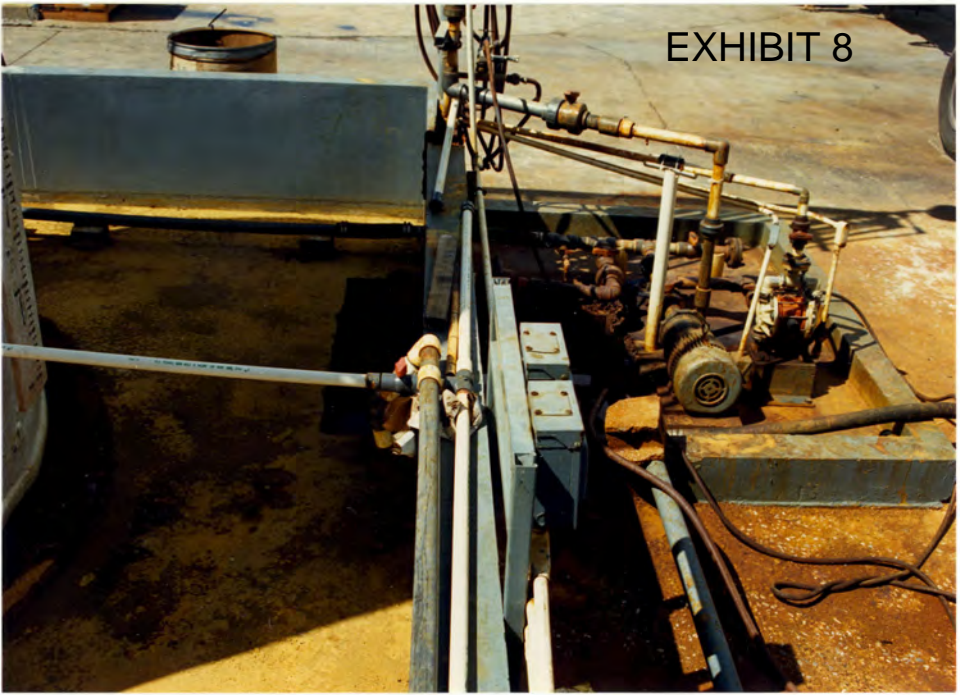


19. Storage Tanks A and B (SWMU 4) to right of photo. Tank in left of photo is a hydrochloric acid product storage tank. Note concrete containment around tanks.



20. Base of Storage Tank A (SWMU 4).





21. Sump system in containment area for Storage Tanks A and B (SWMU 4).



22. Tanker Truck (SWMU 7). Note this unit is mobile.



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P. O. Box 7283  
Ponce, PR 00732-7283

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EXHIBIT 8-A

10F2

*Checkpoint*



**CHECKPOINT SYSTEMS OF PR, INC.**  
**PRD 091126037**

**RCRA FACILITY INVESTIGATION**

**WORK PLAN**

**PREPARED FOR:**

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 2**  
**290 BROADWAY**  
**NEW YORK, NEW YORK 10007-1866**

**SABANETAS INDUSTRIAL PARK**  
**PONCE, PUERTO RICO**

**December 2007**

12/12/07



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1.0 **PURPOSE**

- 1.1. This document defines the guidelines to determine the nature and extent of known releases or suspected release from the former Checkpoint Systems of PR, Inc, and EPA I.D. No. PRD091162037 (Checkpoint) facility located in the Sabanetas Industrial Park, Lot 6, Ponce, Puerto Rico. This document will be referred to as the “RFI Work Plan”.

2.0 **SCOPE**

- 2.1. The RFI Work Plan will fully characterize the solid waste management units (SWMUs) and Areas of Concern (AOC) requiring further investigation, previously identified in an EPA sponsored RFA done in March 1989 by A.T. Kearney, Inc. These units are the SWMUs #5 Scrubber Water tank (Above Ground Storage Tank), #8 Empty Drum Storage Area (Ground Surface), #9 Dumpster with Aluminum shavings, and #10 Scrubber Water Drainage Area. Also the two AOC, #1 Raw Acid Storage Area, and # 2 Over Flow Spill Area.
- Of the ten SWMUs identified in the RFA units #1 Lagoon A (Surface Impoundment), #2 Lagoon B (Surface Impoundment), #3 Lagoon C (Surface Impoundment), #4 Above Ground Storage Tanks A, and B, #6 Scrubber Unit (above ground) and #7 Tanker Truck (vehicle) requires “No Further Action” by virtue of the March 1989 RFA report recommendations and EPA further concurrence in September 2007.
- 2.2. On March 15, 1989 personnel from Harding Lawson Associates, under contract from A.T. Kearney, did a Sampling Visit (SV) to the Checkpoint facility in Lot 6. At the time of the RFA report publication from A.T. Kearney the analytical results of the SV were not available. Below there is a tabulation of the analytical results from the split samples retained by Checkpoint. Copy of the full report is in the Appendix 1.



**RFA Sampling Visit- March 15, 1989**  
**RESULTS OF ANALYSES**

**WATER SAMPLES**

	pH (S.U.)	TOX (ug/L)	TOC (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Selenium (mg/L)
Well No. 1	6.86	30	4.3	<0.01	0.03	0.01
Well No.2	6.95	220	3.2	0.02	0.2	<0.01

**SOIL SAMPLES**

	Cadmium (mg/Kg)	Chromium (mg/Kg)	Selenium (mg/Kg)
Scrubber Water Tank	2.4	31	<1.0
Spill Area No. 1-Outside of Fence	1.1	21	<1.0
Soil Sample outside of Fence	0.98	23	<1.0
Spill Area No. 3-Outside of Fence	0.98	21	<1.0
Empty Drum Storage Area	2.9	20	<1.0
Empty Drum Storage Area	3	34	<1.0
Former Lagoon C #1	0.56	22	<1.0
Background #1	1.8	30	<1.0
Former Lagoon C #2	1.3	18	<1.0
Background #2	3.2	39	<1.0
Unknown	0.64	24	<1.0

Note: Total Organic Halogens (TOX) and Total Organic Carbon (TOC) were selected instead of the Volatile and Semi Volatile Organics package in the groundwater samples. The nature of the Checkpoint process chemistry is totally inorganic i. e. Ferric Chloride and Aluminum Chloride dissolved in a weak Hydrochloric Acid solution.

The selected TOX and TOC parameters can corroborate the absence of organics chemicals in concentrations above natural occurring levels in the ground water.



### 3.0 Description of Current Conditions

- 3.1.1 Checkpoint started manufacturing activities in the Sabanetas Industrial Park, Lot 6, on summer 1980. The operation consisted of two horizontal etchers and a web to tags conversion operation. The operation continued in Lot 6 until the year 1990, when Checkpoint moved its manufacturing operations in the Sabanetas Industrial Park from Lot 6 to Lot 28. See Figure 1. The facility of Lot 6 was kept under lease contract from the Puerto Rico Industrial Development Company (PRIDCO) until year 2000. When the unit was refurbished and lease contract was terminated. From 1990 to year 2000 the facility was use for storage purposes only. From there on the facility has been leased and occupied by a bed mattress factory.
- 3.1.2 A recent inspection of the facility was done and the places were the former SWMUs #5, #8, and #10 and AOC #1 and #2 under study by this RFI are not blocked by new facilities and available for further sampling. SWMU #9 -Dumpster Storage Area is paved and not available for soil sampling. Also the groundwater monitoring wells #2, #3 and #4 were removed and the area is paved. The monitoring well #1 is not paved but, the wellhead was removed, See photos in Appendix 2.
- 3.1.3 The RFI will describe the general geographic location, property lines and neighbors identification, topography and surface drainage, tanks, buildings, utilities, paved areas, easements, right of way, all hazardous waste treatment, storage, or disposal areas in the site, all known past or present product and waste underground tanks or piping, surrounding land uses, location of all production and ground water monitoring wells on the facility and within a 2 mile radius of the facility boundary, also the wind rose and meteorology.
- 3.1.4 The RFI will include a history and description of ownership and operation, solid and hazardous waste generation, treatment, and storage and disposal activities at the facility. Also the dates of past product and waste spills, identification of the material spilled, and a description of the response actions conducted, including the inspection and technical reports generated as a result of the response.



- 3.1.5 The RFI will also include a summary of past permits applied or received, any enforcement actions and their subsequent responses and a list of documents and studies prepared for the facility.

#### 4.0 **RFI Work Plan**

##### 4.1 **Project Management Plan**

- 4.1.1 To manage the RCRA Facility Investigation, Checkpoint is going to use two environmental qualified professionals: our in house contracted Environmental Consultant Sol L. Colón as Project Manager. Sol is a Professional Engineer, Registered Environmental Manager and Certified Environmental Auditor. To assist with all fieldwork and analytical work is The Atmospheric Assessment Group (TAAG), led by Adolfo Valdés Agrait, M.S. Chemistry. Copy of professionals' profiles is in Appendix 3.
- 4.1.2 Checkpoint management, represented in this RFI project by Luis F. Soler, himself a Professional Engineer, and General Manager of the Ponce Checkpoint facility, fully understands the environmental and legal aspects of this project. It is Checkpoint's compromise to assign the Company resources and funds needed to take this RFI to a satisfactory completion.
- 4.1.3 The prior collected analytical data suggests that EPA's Environmental Indicators goals are achievable. The Puerto Rico Environmental Quality Board, EQB, collected soil samples from the former lagoons bottoms and walls on December 1983; those samples were misplaced or mishandled. A second set of samples was collected by EQB on May 1984. A. T. Kearney in the 1989 RFA wrote, "The results of the second set of samples indicate no concentration of compounds high enough to indicate contamination." Secondly, groundwater samples collected for two years by Checkpoint from four monitoring well in the site were analyzed by A.T. Kearney in the 1989 RFA and found to have: "No concentrations of compounds at levels high enough to indicate contamination was detected in any of the monitoring well water samples analyzed." Thirdly, in the well water and soil samples collected by Harding Lawson Associates on



March 1989, Checkpoint split samples results presented in this RFI Work Plan also show no concentration of compounds at levels high enough to indicate contamination.

- 4.1.4 Checkpoint technical approach to this RFI will be to duplicate the sampling and analytical work done in March 1989 on or around the location of the SWMU's and AOC's requiring further action and that are available for sampling. In this manner a comparison can be made to the findings described in Section 4.1.3. The Quality Control/Quality Assurance approach and procedures established by A.T. Kearney and described in the RFA March 1989 report will be follow.
- 4.1.5 A copy of the March 1989 RFA report from A.T. Kearney was made available to the TAAG contractor. Their instructions are to follow the same Sampling Strategy as they relate to: Sample Medium, Rationale for Sampling, Number of Points to be Sampled, Sampling Method, Depths/Types and Selected Analytes. The Sampling Strategy prepared by A.T. Kearney follow the guidelines of: Characterization of Hazardous Waste Sites, A Methods Manual, Volume 2, Available Sampling Methods, EPA 600/4-84-076, December 1984; and, Test Methods for Evaluating Solid Wastes: Chemical Physical Methods, EPA SW-846, July 1982. The Groundwater sampling was prepared with reference to RCRA Groundwater Monitoring Technical Enforcement Guidance Document, Chapter 4: Sampling and Analysis, U.S. EPA, March 7, 1986.
- 4.1.6 Checkpoint proposes to analyze the same analytes in the soil samples as they were analyzed in the split samples of the March 1989 sampling. For the groundwater Checkpoint proposes to rely on previous data collected.
- 4.1.7 The TAAG contractor has available various levels of "Quality Control Data Packages". For this project Checkpoint has requested the TAAG contractor to use Data Package-Level III. A copy of the documents describing the Data Packages and Sample Identification documentation is in the Appendix 4.
- 4.1.8 The Laboratory Methods to be used will be EPA approved and described in the TAAG report Data Package.



- 4.1.9 The TAAG contractor has develop a “Health and Occupational Safety Plan for Field Operations During Regulated Materials and Hazardous Waste Handling Activities”. Copy of the Plan is in the Appendix 5.

5.0 **Public Involvement Plan**

- 5.1 The Puerto Rico Development Company (PRIDCO) is the owner of the facility formerly occupied by Checkpoint on Lot 5 & 6 of the Sabanetas Industrial Park. Checkpoint and PRIDCO close their lease agreement for Lot 5 on year 1900. Further PRIDCO rented this facility to the US Surgical Company. The lease agreement for Lot 6 was close in year 2000. Further PRIDCO rented the facility to the present tenant, Juan C. Torres, Inc, a mattress factory. The adjacent properties are also owned by PRIDCO, except for one property across the street owned by another Puerto Rico Government agency.
- 5.2 Checkpoint will contact PRIDCO, upon approval by EPA of the RFI Work Plan, to get then acknowledge of the proposed sampling activities and get their approval to enter the premises. PRIDCO will get the present tenants approval for Checkpoint to enter the premises and do the Work Plan field activities.
- 5.3 Checkpoint proposes not to inform any other party of the activities to be conducted in the RFI because of the relatively not significant nature of known releases or suspected releases from the former Checkpoint industrial activities. The chemicals handled were inorganic in nature and previous monitoring work suggests little or no contamination in the site. If the RFI produces any findings to the contrary, then Checkpoint will coordinate with EPA further public involvement.

6.0 **Progress Reports**

- 6.1 A preliminary visit to the site shows that places where the SWMU's that require further action, except SWMU #9, are available and clear for further soil sampling. Also the places identified as AOC are clear and available for further sampling.



- 6.2 The condition of the groundwater monitoring wells is not known. Well #1 head was removed and the well is not visible. The area in which Well #2, #3 and #4 are located is paved and the wells are not visible. A visit to ascertain the condition of the wells is presented in the propose schedule of events. In the case the wells are not suitable for sampling, Checkpoint is proposing to rely on previously collected data that show contaminants in concentrations not high enough to indicate contamination. A progress report will be issue.
- 6.3 Other than the condition of the groundwater monitoring wells, Checkpoint does not foresee any condition that can deviate the propose Schedule of Events.
- 6.4 Progress reports to coordinate/update the subsequent activities will be filed after:
- 1- PRIDCO/Tenant authorization to enter premises
  - 2- Sampling Visit
  - 3- Analytical Work Report is received

## 7.0 **Propose Schedule of Events**

7.1 To accomplished the RFI tasks Checkpoint proposes the following schedule of events for EPA approval:

Activity	Due Date
1- Submittal of RFI Plan to EPA.	Jan.02-08
2- Comments by EPA of RFI Plan and authorization to start.	Feb.01-08
3- Transmittal of Authorization from PRIDCO and present Tenant to enter premises.	Feb.29-08
4- Visit/Inspection of Facilities with EPA and TAAG to ascertain Site Conditions.	Mar.14-08
5- Sampling Visit - to be coordinated with EPA, TAAG and Tenant.	Mar.28-08
6- Analytical Work and Report by TAAG contracted laboratory.	May.02-08
7- RFI Technical Report preparation and submittal.	May.30-08



**Figure 1 Sabanetas Industrial Park Plan**

**Figure 1A Checkpoint Systems Lot 5 & 6 Lay Out**



## SITE PLAN

L-306-66  
L-306(A)-72

AREA: 77.087 CDAS. = 263,679.02 SQ.MTS.

M-1216-78

SEC.

1-Phasor Engineering, Inc.

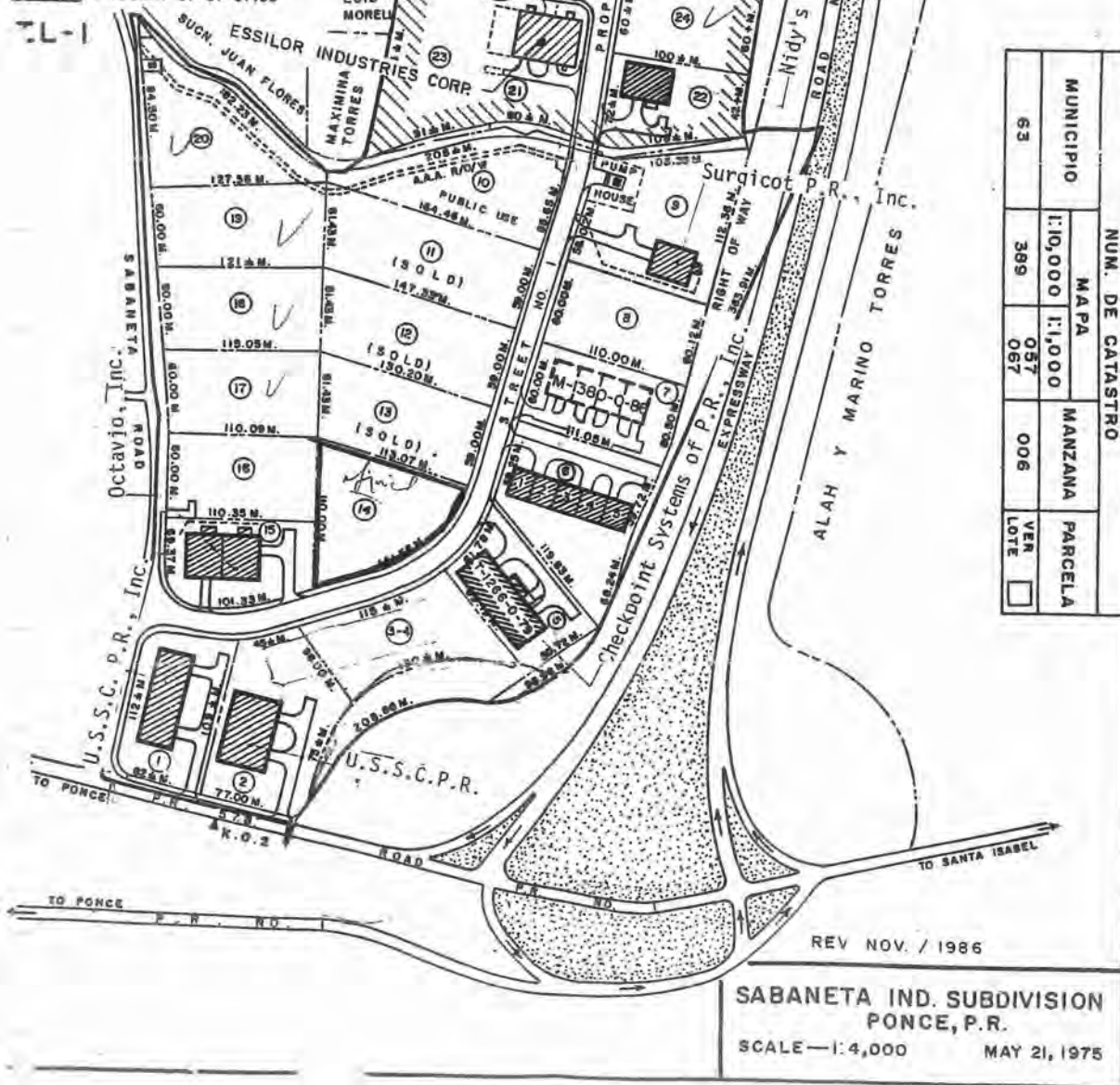
2-Super Sport Uniforms Mfg. Inc.

3-4-5 Checkpoint Systems de P.R., Inc.

OT	BLDG NO.	CDAS.	SQ. MTS.
1	T-0910-0-87	1.64	6,286.63
2	T-0911-0-87	2.70	10,612.07
3-4		2.13	8,371.74
	T-1266-0-79	1.58	6,239.79
5	M-1216-0-78	2.51	9,854.22
7	M-1380-0-86	1.71	6,720.98
8		1.66	6,524.46
9	S-1135-0-74	2.61	10,258.33
0	PUBLIC USE	2.39	9,393.65
1	SOLD	2.34	9,197.13
2	SOLD	2.08	8,175.22
13	SOLD	1.82	7,193.32
14		1.95	7,564.27
5	T-1027-0-73	1.74	6,838.89
6		1.68	6,603.06
17		1.73	6,799.58
18		1.92	7,153.32
9		1.92	7,546.36
0		2.34	9,197.13
1	S-1345-0-83	1.54	5,847.40
22	T-1321-0-80	1.54	5,895.59
23	S-1345-0-83	2.84	10,294.68
4		1.54	5,895.59
5		1.94	7,632.87
26	T-1387-0-86	1.54	5,895.59
27		1.94	7,282.47
28		2.14	7,280.75
9		2.54	9,188.27
0		2.44	9,627.46

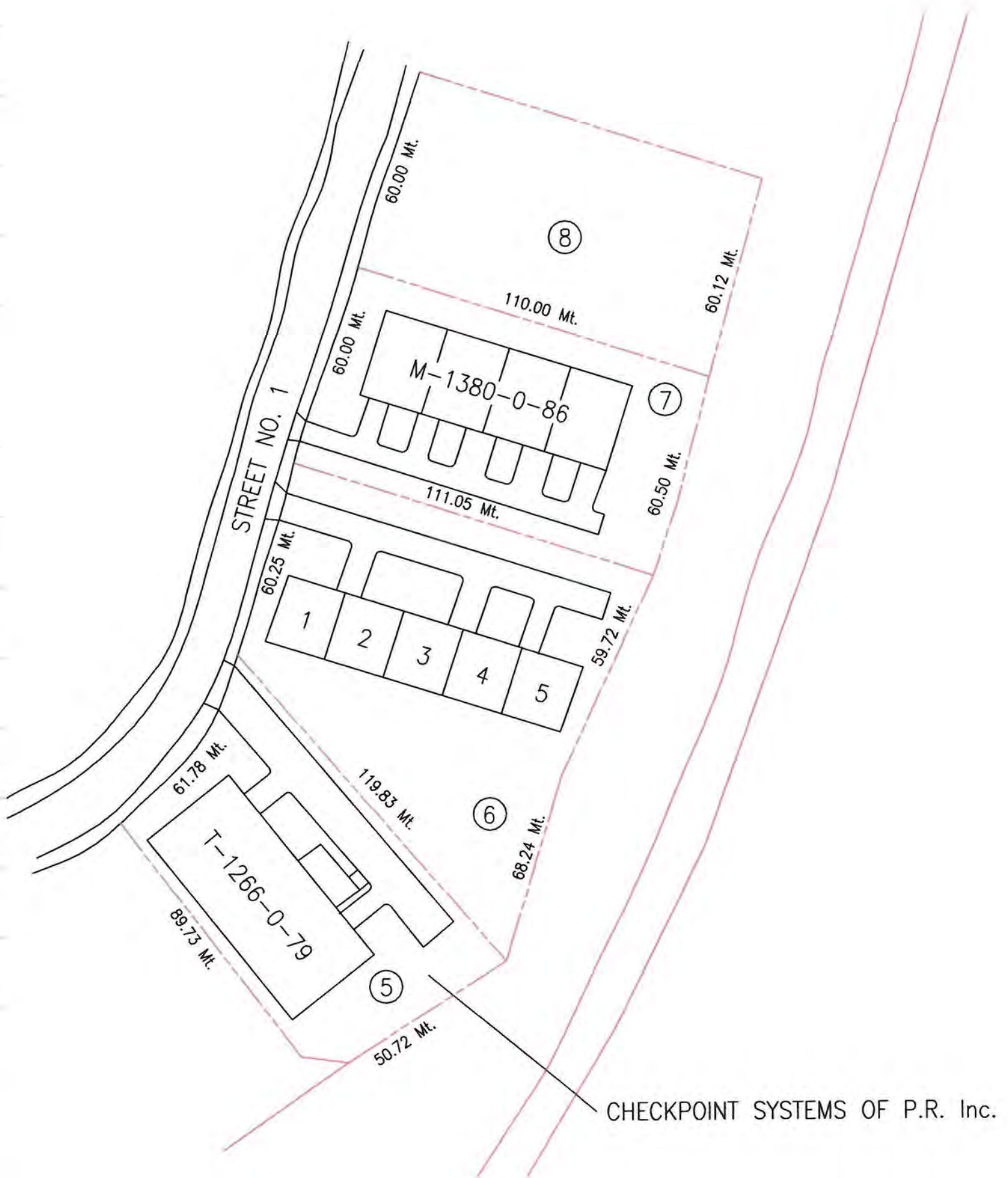
PRIDCO PROPERTY  
AREA INCLUDING E.D.A.  
PROJECT 01-01-01438

TL-1



NUM. DE CATASTRO			
MUNICIPIO	MAPA	MANZANA	PARCELA
63	10,000	057	006
389	057	006	VER
			LOTE







**Appendix 1 Technical Report Checkpoint Split Samples**

**March 1989**



# **ENVIROLABS INC.**

INDUSTRIAL AND ENVIRONMENTAL LABORATORIES

TECHNICAL REPORT SUBMITTED TO  
CHECK POINT SYSTEMS OF PUERTO RICO, INC.  
PONCE, PUERTO RICO

SUBMITTED

BY

ENVIROLABS, INC.  
JULY 11, 1989



RESULTS OF ANALYSIS



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as Well No. 1  
March 15, 1989  
Envirolabs No. 26-537

## PARAMETERS ANALYZED:

pH -----	6.86 S.U. @ 19°C
TOX -----	30 ug/l
Total Organic Carbon, TOC -----	4.3 mg/l
Cadmium -----	< 0.01 mg/l
Chromium, total -----	0.03 mg/l
Selenium -----	0.01 mg/l



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as Well No. 2  
March 15, 1989  
Envirolabs No. 26-538

## PARAMETERS ANALYZED:

pH -----	6.95 S.U. @ 19°C
TOX -----	220 ug/l
Total Organic Carbon, TOC -----	3.2 mg/l
Cadmium -----	0.02 mg/l
Chromium, total -----	0.20 mg/l
Selenium -----	< 0.01 mg/l



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Scrubber Water Tank - Soil Sample drainage area**  
March 15, 1989  
Envirolabs No. 26-539

## PARAMETERS ANALYZED:

Cadmium -----	2.4	mg/kg
Chromium, total -----	31	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Spill Area No. 1 Soil Sample outside of Fence**  
March 15, 1989  
Envirolabs No. 26-540

## PARAMETERS ANALYZED:

Cadmium -----	1:1	mg/kg
Chromium, total -----	21	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Soil Sample outside of Fence**  
March 15, 1989  
Envirolabs No. 26-541

## PARAMETERS ANALYZED:

Cadmium -----	0.98	mg/kg
Chromium, total -----	23	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Spill Area #3 Soil Sample outside of Fence**  
March 15, 1989  
Envirolabs No. 26-542

## PARAMETERS ANALYZED:

Cadmium -----	0.98	mg/kg
Chromium, total -----	21	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc;  
Identified as **Empty Drum Storage Area Soil Sample**  
March 15, 1989  
Envirolabs No. 26-543

## PARAMETERS ANALYZED:

Cadmium -----	2.9	mg/kg
Chromium, total -----	20	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Empty Drum Storage Area Soil Sample**  
March 15, 1989  
Envirolabs No. 26-544

## PARAMETERS ANALYZED:

Cadmium -----	3.0	mg/kg
Chromium, total -----	34	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Former Lagoon C #1 Soil Sample**  
March 15, 1989  
Envirolabs No. 26-545

## PARAMETERS ANALYZED:

Cadmium -----	0.56	mg/kg
Chromium, total -----	22	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Background # 1 Soil Sample**  
March 15, 1989  
Envirolabs No: 26-546

## PARAMETERS ANALYZED:

Cadmium -----	1.8	mg/kg
Chromium, total -----	30	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Background #2** **Front yard - Soil Sample**  
March 15, 1989  
Envirolabs No. 26-548

## PARAMETERS ANALYZED:

Cadmium -----	3.2	mq/kg
Chromium, total -----	39	mg/kg
Selenium -----	< 1.0	mg/kg



## ANALYSIS REPORT

## Sample Identification:

Sample from Check Point Systems of Puerto Rico, Inc.  
Identified as **Unknown - Soil Sample**  
March 15, 1989  
Envirolabs No. 26-549

## PARAMETERS ANALYZED:

Cadmium -----	0.64	mg/kg
Chromium, total -----	24	mg/kg
Selenium -----	< 1.0	mg/kg



CHAIN OF CUSTODY RECORD  
ENVIROLABS, INC.

PROJ. NO.		PROJECT NAME		NO. OF CONTAINER	C17C6130	PH 7.00 TO 4	REMARKS
SAMPLERS: (Signature)		Check Point Systems					
STA. NO	DATE	TIME	STATION LOCATION				
C002	3/15	15:10	537 Well #1	1	✓	✓	PH = 7.0; water
C004	3/15	16:10	538 Well #2	1	✓	✓	PH = 7.0; water
C006	3/15	16:25	539 Scrubber Water Tank	1	✓		Soil sample; drainage area
C008	3/15	17:20	540 Spill area #1	1	✓		Soil sample; outside of fence
C009	3/15	17:40	541 Spill area #2	1	✓		Soil sample; outside of fence
C010	3/15	18:00	542 Spill area #3	1	✓		Soil sample; outside of fence
C011	3/15	18:35	543 Empty Drum Storage area	1	✓		soil sample
C012	3/15	18:40	544 Empty Drum Storage area	1	✓		Soil sample
C0013	3/15	18:50	545 Former lagoon C#1	1	✓		Soil sample
C014	3/15	19:08	546 background #1	1	✓		Soil sample
C015	3/15	19:00	547 Former lagoon C#2	1	✓		soil sample
C016	3/15	19:17	548 Background #2	1	✓		Front Yard; soil sample
C0013D	3/15		549 unknown		✓		Soil sample
RELINQUISHED BY:		DATE / TIME	RECEIVED BY:	RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	
Hector Dominguez		3/16	[Signature]	[Signature]	3/16/15 11:45	Lin A. Hards	
RELINQUISHED BY:		DATE / TIME	RECEIVED BY:	RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	
RELINQUISHED BY:		DATE / TIME	RECEIVED FOR LAB BY:	DATE / TIME	REMARKS		



CERTIFICATION



**Appendix 2    Photos Actual Lay Out Lot 6**  
**December 2007**

**Photo #1 – SWMU's #3, #4, #7, #8, Monitoring Well #1**

**Photo #2 – SWMU's #5, #6, #10, AOC #2**

**Photo #3 – SWMU's #1, #2, #9, Monitoring Wells #2, #3, #4**

**Photo #4 – AOC #1**



















**Appendix 3   Professional Profile – Sol L. Colón**  
- **Adolfo Valdés Agrait**



## PROFESSIONAL PROFILE

### SOL L. COLON, PE

P. O. Box 651, Mercedita, P. R. 00715

(787) 844-7340 / 381-3079 / e-mail: sol.colon@checkpt.com

## QUALIFICATIONS

Experience in the management of Environmental Programs to comply with the requirements of Rules and Regulations of the US Environmental Protection Agency, the PR Environmental Quality Board, PR Aqueducts and Sewer Authority, the PR Department of Natural Resources, the US and PR Office for Safety and Health Administration, the US Federal Aviation Agency, the US and PR Department of Transportation, and others. The provided services include permit transmittals, compliance reports preparation, training required under the different environmental disciplines, experiments and pilot plants design to specify pollution control equipment also, coordinator for RCRA remediation projects. There is an extensive continual education in the environmental pollution control programs, both technical and regulatory.

## EDUCATION & LICENSES

B. S. Chemical Engineering, University of Puerto Rico, Mayagüez, P. R. (1971)

M. S. Business Administration, Catholic University of Puerto Rico, Ponce, P. R. (1980)

Professional Engineer, License 6420, PR State Department (1977)

Registered Environmental Manager & Certified Environmental Auditor, NREP, 2006

## EXPERIENCE

Present: **Contracted Environmental Manager** for Checkpoint Caribbean, LTD  
Sabanetas Industrial Park, Ponce PR

- Manage the Environmental Program

1971-1979 **Director Facilities and Environmental** for Checkpoint Systems of PR

- Manage Utilities Operation and Maintenance
- Manage the Environmental Program
- Manage New Equipment Procurement and Installation

1997-2002 **Director Chemical Operations** for Checkpoint Systems of PR

- Manage Start Up of New Chemical Plant
- Manage Chemical Plant and Chemical Recovery operation
- Manage Plant Environmental Program



**Page 2, Sol L. Colón Professional Profile****1971-1979 Environmental and Safety Consultant** for several Plants in PR

- Transmittal of Environmental Permits
- Prepare and Conduct Environmental and Safety Trainings
- Experiments and Pilot Plant Studies to specify Control Equipment
- Contracted In House Environmental Manager

**1971-1980 Project Engineer and Environmental Official** for Bilchem, LTD Ponce, PR

- Design and Construction of New Projects
- Supervise Draftsmen and Construction Group
- Manage Environmental Program

**1971-1981 Environmental and Safety Consultant** for several Plants in PR

- Transmittal of Environmental Permits
- Prepare and Conduct Environmental and Safety Trainings
- Experiments and Pilot Plant Studies to specify Control Equipment
- Contracted In House Environmental Manager

**1971-1982 Vice President and Operations Manager** for Proteco, Inc, Peñuelas PR

- Manage Industrial Landfill Operations
- Design and Permit Transmittal of Industrial Landfill

**1971-1983 Environmental Manger** for PPG Industries, Inc. Guayanilla PR

- Start Up Shift Supervisor Chlorine-Caustic Soda Plant
- Process Design Engineer
- Chemical complex Environmental Engineer

**PROFESSIONAL AFFILIATIONS**

College of Engineers and Surveyors - License PE 6420

National Registry of Environmental Professions – REM 12228 – CEA 9774

**COMMUNITY AFFILIATIONS**

Member of Local Environmental Quality Board “SARA Committee”.

Member of Ponce Yacht and Nautical Club

Member of the PR Senior Golf League



Adolfo Valdés Agrait  
P. O. Box 219; Mercedita, P. R. 00715  
(787) 842-8592 / 504-0279 / e-mail: taagroup@prtc.net

## QUALIFICATIONS

Experience in the design and management of Environmental, Safety and Health projects. Background in laboratory operations. Industrial Hygiene projects for all Industrial Groups, development of Industrial Hygiene/Safety Programs, permit procurement, negotiation, and development of environmental/safety project plans. Experience in environmental assessments, management of hazardous materials and industrial hygiene sampling and analysis projects. Management skills include the development of fiscal budgets, personnel supervision, purchase of environmental, safety and control equipment, and installation. Computer literate and skills in computer (web) search.

## EDUCATION

B. S. Chemistry, Catholic University of Puerto Rico, Ponce, P. R. (1969)

M. S. Chemistry, University of Puerto Rico, Mayaguez, P. R. (1981)

M. B. A. (32 Credit Units towards degree)

## EXPERIENCE

Present Assignment: Senior Scientist, The Atmospheric Assessment Group, Ponce, P. R.  
[1997-2007] P. O. Box 219, Mercedita, Puerto Rico (787) 842-8592

Oversee that the analytical, environmental, and industrial hygiene services are rendered in compliance with the clients Corporate Program and Objectives. Includes the supervision of field personnel during the execution of projects and assessments, the development of projects plans and execution of major analytical assignments related to EPA, EQB, PRASA, OSHA, USDA and FDA permits. Serve as liaison among clients and the regulatory agencies and provide technical support during the execution of the assignments. Prepare applications for environmental permits, prepare final reports for the projects, and make presentations to the parties involved. Additional responsibilities include training of employees in different areas of the chemical and environmental, safety and health services.

Registered the company at the Environmental Quality Board as an Asbestos Certified Training Provider, and at the Occupational Safety and Health Administration (OSHA) as an Authorized Training Provider for Workers and Supervisors in the General Industry, the Construction Industry, and for Disaster Site Scenarios.

Major present assignments distributed among eight "Fortune Five Hundred" corporations; including four pharmaceutical facilities, three surgical manufacturing facilities, and one petrochemical facility. Primary responsibilities are related to their respective Corporate Industrial Hygiene Programs. My contribution to these include the planning, execution and report



preparation of I.H. Assessments, sampling, coordination of the analyses, preparation of the final reports, and presentation to management at different levels of review.

Adolfo Valdés Agrait

Resume, page 2

1982-1996     Director of Analytical Services, Envirolabs, Inc., Ponce, P. R.  
P. O. Box 59 Mercedita, Puerto Rico (787) 848-6050

Prepared company projects from budget to completion. Executed EHS Projects for clients in different industrial groups. Maintained compliance of clients and company permits issued by the regulatory agencies such as EPA, EQB, OSHA, PRASA, USDA and FDA. Established a program for ISO 9002 registration. Supervised laboratory personnel (23).

1979-1982     Senior Environmental Specialist, CORCO, Guayanilla, P. R.  
Firm Delivery, Ponce, Puerto Rico (787) 842-3030

Shared the responsibilities of the Environmental Protection Group and the Industrial Hygiene Division. Performed all monitoring activities related to employee exposure within the petrochemical complex. Prepared monthly reports to comply with wastewater discharge permits, air permits, hazardous waste disposal, drinking water, and exposure of employees to air contaminants. Member of the CORCO-US Coast Guard-EPA Liaison Group.

1976-1979     Assistant Director of Services, OMNI Research, Inc. ,  
El Retiro Industrial Park, San German, P. R (787) 892-2680

Shared the responsibility of the laboratory operation with the company president. Managed the Organic Synthesis, Research, and Development Laboratory. Trained employees in methods validation and statistical analysis. Performed industrial hygiene and laboratory safety audits for all industrial groups, prepared analytical reports and offered project report presentations to the clients.

#### PROFESSIONAL AFFILIATIONS

Puerto Rico Chemist Association, Chem. Lic. No. 0965  
American Industrial Hygiene Association, 1989-119548

#### COMMUNITY AFFILIATIONS

Member of Local Chamber of Commerce "New Member Committee".  
Member of Local Environmental Quality Board "SARA Committee".  
Treasurer for the Local Neighborhood Watch Group.  
AARP Safety Driving Program Instructor

#### PROFESSIONAL REFERENCES



Eng. Lorenzo R. Iglesias, Environmental Engineer (787) 502-3188

Lic. Rafael Elvira, Environmental Law. (787) 842-9952

Eng. Francisco J. Abad, President; EnviroAmbiental Corporation. (787) 783-2282



## **Appendix 4    Quality Control Data Package**





## THE ATMOSPHERIC ASSESSMENT GROUP

Adolfo Valdés Agrait  
Senior Partner  
P O Box 219  
Mercedita, Puerto Rico 00715-0219

Environmental Consultant  
AIHA Laboratory No. 101677  
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### QUALITY CONTROL DATA PACKAGES

#### DATA PACKAGE-LEVEL I; COST: NO CHARGE

TEST RESULT	CHAIN OF CUSTODY RECORD	ANALYST INITIALS
METHOD OF ANALYSIS	DATE TEST COMPLETED	CHEMIST CERTIFICATION

#### DATA PACKAGE-LEVEL II; COST: 15% OF ANALYSIS

TEST RESULT	CHAIN OF CUSTODY RECORD	ANALYST INITIALS
METHOD OF ANALYSIS	DATE TEST COMPLETED	CHEMIST CERTIFICATION
LABORATORY BLANKS	MATRIX SPIKES	SURROGATE RECOVERY
LABORATORY DUPLICATES	MATRIX DUPLICATES	LAB. CONTROL SAMPLES

#### DATA PACKAGE-LEVEL III; COST: 20% OF ANALYSIS

TEST RESULT	CHAIN OF CUSTODY RECORD	ANALYST INITIALS
METHOD OF ANALYSIS	DATE TEST COMPLETED	CHEMIST CERTIFICATION
LABORATORY BLANKS	MATRIX SPIKES	SURROGATE RECOVERY
LABORATORY DUPLICATES	MATRIX DUPLICATES	LAB. CONTROL SAMPLES
METHODS REFERENCE	LABORATORY CHRONICLE	METHOD SUMMARY
SAMPLE DATA	INSTRUMENTS PRINTOUT	LABORATORY NOTES

#### DATA PACKAGE-LEVEL IV; COST: 25% OF ANALYSIS

TEST RESULT	CHAIN OF CUSTODY RECORD	ANALYST INITIALS
METHOD OF ANALYSIS	DATE TEST COMPLETED	CHEMIST CERTIFICATION
LABORATORY BLANKS	MATRIX SPIKES	SURROGATE RECOVERY
LABORATORY DUPLICATES	MATRIX DUPLICATES	LAB. CONTROL SAMPLES
METHODS REFERENCE	LABORATORY CHRONICLE	METHOD SUMMARY
SAMPLE DATA	INSTRUMENTS PRINTOUT	LABORATORY NOTES
STANDARD CALIBRATION	CONTINUOUS CALIBRATION	DATA REDUCTION

**SPECIFIC DATA PACKAGE MUST BE REQUESTED IN THE CHAIN OF CUSTODY RECORD  
ALONG WITH THE PARAMETERS TO BE ANALYZED**



DATE: \_\_\_\_\_

TAAG Sample No. \_\_\_\_\_

Sample ID \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Sampler: \_\_\_\_\_

THE ATMOSPHERIC ASSESSMENT GROUP  
PO BOX 219; Mercedita, PR 00715  
(787) 842-8592 / 504-0279 / e-mail:taagroup@prtc.net



**THE ATMOSPHERIC ASSESSMENT GROUP**

P. O. BOX 219 MERCEDITA, P. R. 00715-0219

TEL / FAX (787) 842-8592 / 504-0279

TAAG NO. \_\_\_\_\_

SAMPLE DATE \_\_\_\_\_

SAMPLE TIME \_\_\_\_\_

SAMPLE ID \_\_\_\_\_

SAMPLER INITIALS \_\_\_\_\_





**Appendix 5    Health and Safety Plan**





**EQB CERTIFIED ASBESTOS SCHOOL**  
**THE ATMOSPHERIC ASSESSMENT GROUP**

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Senior Partner  
P. O. Box 219  
Mercedita, Puerto Rico 00715-0219  
8592/504-0279

Environmental Consultant  
AIHA PAT Program Participant  
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Tel. / Fax (787) 842-

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**HEALTH AND OCCUPATIONAL SAFETY PLAN**  
**FOR FIELD OPERATIONS DURING**  
**REGULATED MATERIALS AND HAZARDOUS**  
**WASTE HANDLING ACTIVITIES**

DATE ESTABLISHED: JANUARY 1998

REVISION # 1: JANUARY 2001  
REVISION # 2: JANUARY 2002  
REVISION # 3: JANUARY 2003  
REVISION # 4: JANUARY 2004  
REVISION # 5: JANUARY 2005  
REVISION # 6: JANUARY 2006  
REVISION # 7: JANUARY 2007

REVISED BY:

\_\_\_\_\_  
Adolfo Valdés Agrait, M. Sc.;

IMPLEMENTATION OFFICIAL:

\_\_\_\_\_  
Javier Figueroa Rodríguez, Sup. Hazardous Materials



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- 1.2 Training Requirements

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### **3.0 SAFETY EQUIPMENT**

- 3.1 Protection Levels

### **4.0 OPERATIONAL PROCEDURE FOR AREA ACCESS**

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### **9.0 HEALTH AND OCCUPATIONAL SAFETY PLAN REVISION**

### **APENDIX A. PERSONNEL CERTIFICATES ACCUMULATIVE LOG**



## **VISION AND COMPROMISE FROM OUR COMPANY AND EMPLOYEES TO KEEP A SAFE WORK ENVIRONMENT**

Our Company, The Atmospheric Assessment Group (TAAG), has prepared this Health and Occupational Safety Plan for all contracted jobs. The Plan is designed to protect the health and occupational safety of our employees and other contracted employees that participate in our projects. The Plan is based in the Guide Manual for Health and Occupational Safety for Hazardous Waste Handling Activities published jointly by the National Institute for Health and Occupational Safety, NIOSH; the Office for Health and Occupational Safety, OSHA; the United States Coast Guard, USCG and the Environmental Protection Agency, EPA.

This Plan is an operational guide for our employees to follow and established a safe work environment for all persons present in the work place. All employees will have access to the Plan and will follow all instructions in it.

Our company has the compromise to establish good work practices and promote a safe work environment for all employees involved. Each employee is responsible for his safety and that of fellow employees.

We will strictly follow our Company norms and those norms of the Companies we are contracted to work on. There is a zero tolerance to safety rules noncompliance. Sanctions will be imposed depending on the level of danger for not using safety rules.



## **1.0 HEALTH AND OCCUPATIONAL SAFETY PLAN INTRODUCTION**

The Atmospheric Assessment Group (TAAG) has prepared this Health and Occupational Safety Plan for all jobs assigned to the Company. This Plan is designed to protect the health and safety of our employees assigned to the different projects and that of other participating Company employees as well. The Plan is based in the Guide Manual for Health and Occupational Safety for Hazardous Waste Handling Activities published jointly by the National Institute for Health and Occupational Safety, NIOSH; the Office for Health and Occupational Safety, OSHA; the United States Coast Guard, USCG and the Environmental Protection Agency, EPA.

This Plan is an operational guide for our employees to follow and established a safe work environment for all persons present in the work place. All employees will have a copy of the Plan and will follow all instructions in it.

### **1.1 WORK GROUP COMPOSITION**

The work group will be composing of a Supervisor, an Industrial Hygienist and the workers. Each work group will have a minimum of three (3) employees. The only exemption in which only two (2) persons will form a work group is when the contracted job is to take samples to be delivered to the Laboratory for analysis. In all jobs the work group will revise this Plan guides before endeavoring in fieldwork. In this way the work group can recognize and anticipate dangers associated with the assigned job and take precautionary measures for adequate protection.

### **1.2 TRAINING REQUIREMENTS**

All TAAG employees need to take a training session on health and environmental safety prior to start a job in which there is the possibility of handling hazardous materials. Each employees will be train to handle hazardous waste and how to respond to an environmental emergency following the requirements of the Health and Occupational Safety Administration (OSHA), and the Training Manual to Handle Hazardous Waste and the TAAG Safety Manual. Initial training will be given at the start of the employment and yearly refreshers training will follow. The training program includes the among others the following activities:

1. OSHA 40 Hrs. Supervisor Course (Internal Program)
2. Laboratory Chemical Hygiene Plan (Internal Program)
3. How to read a Material Safety Data Sheet (Internal Program)



## 1.2 TRAINING REQUIREMENTS (Cont.)

4. Handling/Supervision of Asbestos Containing Materials (AES Int'l, Inc.)
5. Handling/Supervision of Lead Base Paint (AES Int'l, Inc.)
6. Respiratory Protection Program (Internal Program)
7. Respirators Fit Test (Internal Program)
8. Medical Evaluation (CMT or Industrial Health Services, Inc.)
9. Spirometry and Chest X-Ray (CMT Industrial Health Services, Inc.)
10. Laboratory Safety Program (Internal Program)
11. Fire Extinguishers Use (Local Fire Department)
12. First Aid Procedures (Red Cross – Local Office)

## 2.0 WORKPLACE RISKS

The Supervisor is responsible to implement needed work safety rules to minimize all risks related to the handling of contaminated material and those physical risks present in the workplace. Also, it is important to pay attention to the electrical energy risks related to the use of connectors, electrical extensions, electrical portable power plants, and all “live” cables present in the site under investigation.

There are some actions that can increase the possibility that a person becomes contaminated or accidentally has contact with contaminated material. The forbidden activities include: eating, drinking, chewing gum or tobacco or smoking. Hands and face should be carefully washed before leaving the workplace and before any eating or drinking or temporarily exit the workplace.

It is important that all employees shave before starting the daily work activities. Any excess of facial hair can interfere with the respiratory protection equipment fit. Even when respiratory equipment is not commonly used in the type of work done, the workers should be ready to use respiratory protection “C” Level. All workers should avoid unnecessary contact with surfaces that could possibly be contaminated. This includes walking over liquid residues, mud or discolored surfaces; kneel on the floor, rest on, seat or place equipment on top of drums, containers, vehicles, and heavy equipment or on the floor.

Medicines and alcohol can increment the adverse effects of toxic chemicals exposure, for this reason prescribed drugs should not be taken during work activities. Also the consumption of alcoholic beverages before or during the work activities is not allowed.



## **2.0 Workplace Risks (Cont.)**

The suffocation stress, caused by heat, should be monitored by the Safety Supervisor. The Supervisor will take appropriate and needed measures to move away any potential victim of suffocation stress in the workplace. A rest area and liquid fluids will be available for workers to replenish body fluids lost during work activities and heat exposure.

## **3.0 SAFETY EQUIPMENT**

### **3.1 PROTECTION LEVELS**

The level of protection will be determined by the nature of the type of materials present in the project site. The selected level must guarantee the safeties of the field personnel, according to the correct potential danger determination.

In those instances where the type of material at the site is not known or the danger can not be certainly determined or for any reason the operational activities change, the health and safety official must make a decision as to what level of protection upgrade the actual selected level. The danger level must be determined by visual inspection, sampling or available information from reliable sources. Once the danger level is identified, and then the appropriate level of protection will be established according to the danger level. The levels of protection will be continuously evaluated by the Field Supervisor to adapt to changes that could occur in the working conditions.

The protection levels to be used by The Atmospheric Assessment Group are:

**LEVEL 1.** The Level of protection "A" must be selected when the safety official makes a reasonable determination that the risk of respiratory contact requires the highest level of protection available. Even though when Level "A" gives the maximum available protection, this level does not protect against all possible danger that could be present. The safety official must contemplate the fact that suffocation stress be a risk factor in the operative environment because of the use of level "A" protection. Easiness to move is not a determining factor, but suffocation stress can affect the work speed, the itinerary and other labor practices.

**LEVEL 2.** The safety official must adopt the protection Level "B" only when the highest level of respiratory protection is needed. This level must not be determined for any other factor other than respiratory protection, like protection to all body parts not protected by normal personal protection equipment, let's say the neck.



### 3.1 PROTECTION LEVELS (Cont.)

**LEVEL 3.** The safety official can choose the protection Level "C" when the respiratory protection level is known. This level of protection can also be chosen when it is assume beforehand that the working conditions will not exceed the level protected by air purifying respirators, and where the exposure to hazardous material of other body parts, like the neck, is almost none. Level "C" requires that the worker carry an emergency escape respirator. A half facemask is acceptable when the handle contaminant concentration in the air is less than the contaminant Time-Weighted Average (TWA).

**LEVEL 4.** Level "D" is basically the basic work uniform. Inspectors and workers must not allow using casual attire in their workplace. As a preventive measure an emergency escape respirator can be required. The criteria for respiratory protection and proper clothing are summarized in Table 1, next page. The adequate fit of the personal protection equipment is very important when the right respiratory protection is established. The personal protection equipment must be check and tried before starting the daily work activities by all personnel in the workplace. Each worker must have a respirator assigned for the duration of the project.



**TABLE 1**  
**CRITERIA FOR THE SELECTION OF PROTECTION LEVEL BASED ON THE**  
**MOST HAZARDOUS CONTAMINANT CONCENTRATION**

	<b>LEVEL D</b>	<b>LEVEL C</b>	<b>LEVEL B</b>	<b>LEVEL A</b>
Air Quality above Normal level (PPM)	<b>0</b>	<b>0-5</b>	<b>5-500</b>	<b>500-1,000</b>
Respirator Type**	<b>Escape</b>	<b>Full Face/ Escape</b>	<b>SCBA</b>	<b>SCBA</b>
<b>EQUIPMENT AND CLOTHES</b>				
Boots	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Safety Glasses or Equivalent	<b>X</b>	<b>X</b>	<b>X</b>	
Hard Hat	<b>X</b>	<b>X</b>	<b>X</b>	
Gloves, Internal & External	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Over Boots	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Manluk	<b>X</b>	<b>X</b>	<b>X</b>	
Chemical Protector Manluk		<b>X</b>	<b>X</b>	
Hermetically Closed Encapsulated Suit				<b>X</b>

\*\*The respirator is allowed only when the presence of organic vapor ingredients are identified and the adequate respirator cartridges are available.



#### **4.0 OPERATIONAL PROCEDURE TO ENTER THE WORK AREA**

The entrance and exit from the workplace and also, the alternate emergency escape routes must be determined before starting the project. Before starting the job the fastest and accessible route to the nearest hospital must be discussed. The specific workplace safety risks will be discussed and the recommended safety requirements will be adopted, along with those established by TAAG. The personnel will rehearse all those procedures they are not familiarized with before they are performed in the workplace. The number of workers and equipment in the workplace will be at the minimum needed to reduce the exposure to contaminated material. The workers/equipment will be minimized as the site operations allowed, without affecting the job effectiveness. The procedure to evacuate the contaminated work zone will be established before starting the job activities in the workplace.

#### **5.0 EMERGENCIES HANDLING**

##### **5.1 FIRST AID**

All The Atmospheric Assessment Group employees assigned for field work will have available in the workplace the following health and safety equipment at all times:

First Aid Chest

Half Face Respirator

Organic Vapors Cartridges

Hearing Protection

Protection Gloves

Protection Suit (Manluk) Chemical Resistant

Boots with Steel Plate

Eye Wash Station

In the workplace and at all times there will be at least one person trained to give first aid procedures. This person must have a training certificate in first aid from the American Red Cross or an equivalent training.



## 5.2 EMERGENCY TRANSPORTATION

There will be a vehicle in the workplace at all times ready to transport personnel to a hospital in case of an emergency. All available routes to the hospital must be discussed prior to start the project activities.

## 5.3 CONTINGENCY PLAN

Before the start of activities in the workplace the supervisor and workers will review all safety considerations with the assigned safety official. The safety official is the responsible person to implement the design safety measures. Also, he will coordinate with the client all situations related to an event or emergency..

## 5.4 PRESS RELEASES

With previous agreement with the client, only the project Supervisor can communicate with press representatives. Under no circumstances the workers or other personnel will offer information to the news media.

## 7.2 POTENCIAL DANGERS

The potential dangers associated with the various workplaces include:

Accidents, Contacts, Inhalation, Hazardous Material ingestion and Explosions / Fires.

### 5.5.1 ACCIDENTES

The accidents must be handled on a case-by-case basis. Wounds, beatings, cramps, etc., allows for affected persons to go through the decontamination process before receiving the first aid procedures. More serious injuries do not allow for this procedure to happen, even more when the nature of the injury is of such magnitude that the victim cannot be move. The nature and the superficial contamination level in the site mostly are low enough to permit emergency vehicles to reach the victim without risking themselves. But, in case of a site with restricted access, trained TAAG's personnel will transport the accident victims to the ambulance or other vehicle to be transported to the hospital.



### 5.5.2 CONTACT OR INGESTION OF HAZARDOUS MATERIALS

If the established safety procedures are followed and the proper use and maintenance of the personal protection equipment, these types of risks are minimize. But, there is always the possibility that somebody will have contact or ingest hazardous materials. One possibility is the accidental perforation of a cylinder. In case of a minor contact or ingestion with known substances, contact should be made with the nearest Poison Control Center, normally located in the Regional Hospital. The victim should be immediately taken to this Center for evaluation and treatment.

### 5.5.3 EXPLOSION

All fieldwork personnel should know how to use the explosive gas mixtures meters and what to do to move away from the site in case there is any indication of a danger condition. The detection of a danger condition will be reported to the appropriate Government agency for them to implement an evacuation plan, if the danger condition requires evacuation of persons.

### 5.5.4 FIRE

The explosive gas mixture meter will also alert of imminent fire danger in the workplace. The higher fire risk can be due to the handling Isopropyl Alcohol, commonly used for decontamination purposes. Under no circumstance smoking is permitted in the workplace zone. Fire extinguishers with carbon dioxide will be kept near the decontamination area and the workplace area at all times. The State Fire Department should be notified of the work activities and the operation related dangers, in case they need to be activated.

### 5.5.5 REGULAR INSPECTIONS OF THE WORK AREA

The field supervisor will be in charge of making regular inspections during the field operations. The initial information compiled should include the following potential dangers present in the work area;

- A. Possibility of Chemical Contaminants Exposure
- B. Possibility of Explosion or Fire



### 5.5.5 REGULAR INSPECTIONS OF THE WORK AREA (Cont.)

- C. Possibility of Oxygen Deficiency
- D. Possibility of Exposure to Radiation
- E. Possibility of Exposure to Biological Contaminants
- F. Possibility of Fall Danger
- G. Possibility of Electrical Danger
- H. Possibility of Exposure to Heat Stress
- I. Possibility of Exposure to Noise

Once the work area is evaluated, the supervisor and employees together will inspect the work area to identify danger and determine which controls are needed to prevent accidents in the workplace. The workers will inspect the work area every day before starting with their tasks. If any of the above dangers is present, they will notify their supervisor, who will then contact the proper authorities to correct the situation.. The supervisor will determine if the workers can start with the job or if they need to wait until the situation is corrected.

## 7 EVACUATION LEVELS

The workers in the job area will be monitoring the wind direction while they are at work. This can be accomplished using an anemometer or a cloth flag. If any condition develops that suggest leaving the work area, the workers will move upwind to a distance of approximately on hundred (100) feet or more, as indicated by the readings of the Organic Vapor Analyzer (OVA). Suited with a tank of air (SCBA) and a safety harness, the safety official or a member of the team can come back to the workplace to determine if the detected condition is transitory or persistent. If the situation is persistent an alarm will be sound to notify all personnel about the situation and the need to evacuate the work zone or the need to use an SCBA.

The evacuation process will occur in three levels:

1. Leave the immediate work area (to a distance of 100 feet or more)
2. Evacuate the Work Area
3. Evacuate near areas and neighborhoods



### 6.1 Leave Work Area

Whenever the breathing air in the work environment has contaminants concentrations in excess of the permissible levels for the personal protection equipment being wear by the workers; the workers must leave the workplace immediately. They can return once they have a higher level of respiratory protection or confirmation is received that the situation is over.

Any protective equipment failure or any minor accident, requires the affected persons to leave the immediate work area to a distance of one hundred (100) feet or more. The affected persons can come back to the workplace once the failure is corrected and the first aid is administered or decontamination procedure is done, as required.

A respirator malfunction requires that affected persons leave the work area to a distance of one hundred (100) feet or more. If this occurs, the re4spirator will be replaced and the person will come back to the project.

### 6.2 Evacuate Work Area

When ever the environmental air conditions show any indication of excessive toxic gases or explosive levels and persistent combustible gas, like for example:

All excess of a hundred (100) ppm  
Fire or major accident  
Imminent Explosion

The work area should be evacuated.

### 6.3 Evacuate close Areas and Neighborhood

Any suffocating and persistent discharge of toxic or explosive vapors from an excavation, for example: possible pressure discharges from an excavation cause by a punctured underground storage tank or cylinder) can trigger the evacuation of close areas and neighborhoods. The air quality will be monitored in distance intervals downwind to determine the danger risk to close areas and neighborhoods before the evacuation is initiated.



## 7.0 DECONTAMINATION

### 7.1 PERSONAL DECONTAMINATION PROCEDURES

A decontamination procedure will take place for all personnel before leaving the work area. Under no circumstance, except in case of an emergency, will the personnel be permitted to leave the work area without being decontaminated.

The procedure to take off the protective devices is as follows:

- 1- Deposit all tools, sampling equipment, samples and trash in the deposit container. This deposit containers consist of plastic containers and trash bags.
- 2- Go to the decontamination area and shake your shoes to clean the exterior boot dirt. If needed wash the boots with clean water in the cleaning area of the decontamination area.
- 3- Take out the adhesive tape from the boots and remove the boots. Discard the adhesive tape in the designated container.
- 4- Remove your hard hat and the respirator and stored them in the designated place.
- 5- Remove the Manluk and discard in the container.
- 6- If the site has a mobile decontamination unit, all personnel will take a shower before leaving the project.

NOTE: The disposable articles i.e. Manluk, interior gloves and boot covers will be replace daily unless there is a reason to substitute them more frequently. A hose or a wash area will be available to wash and for sanitary purposes.

### 7.2 DESCONTAMINATION EQUIPMENT

The equipment to be decontaminated during the project can include:

- 1- Heavy Equipment
- 2- Tools
- 3- Samples Containers
- 4- Sampling Equipment
- 5- Respirators

All tools and miscellaneous equipment should be deposit in a pail or equivalent container. These articles will be brushed and washed and deposit in a second pail to be taken to the decontamination station. Once in the decontamination area the articles will be wash twice with Alconox or a detergent solution and rinse with Acetone or Isopropyl Alcohol. The last step is a rinse with clean water.



### 7.2.1 TOOLS AND HEAVY EQUIPMENT

It is possible that excavating equipment contaminates when doing soil excavations. The equipment will be wash with pressure water and/or steam. Then the equipment will be wash and rinse with soap and water. Any loose material will be remove with a brush. Personnel doing this task will use protection equipment Level "C".

### 7.2.2 SAMPLES CONTAINERS

The sampling bottles surface will be decontaminated prior to packaging and transport to the Analytical Laboratory. The sample containers will be dried and bagged in individual "zip-loc" bags. Once the sample is in a clean container, they will be stored in a safe area until ready to be shipped.

### 7.2.3 SAMPLING EQUIPMENT

The sampling equipment and monitoring equipment of all type, will be protected from contamination as far as possible. They will be covered with a plastic bag and adhesive tape as possible, not to interfere with the performance of the equipment. The OVA meter can be stored in a transparent plastic bag, which allows for reading gauges and operate meter buttons. The OVA sensor can be partially wrap, keeping the tip of the sensor and the discharge orifice free for proper operation.

The contaminated equipment will be taken from the deposit area to the containers. There they will be unwrapped, the protective cover will be discarded. Any dirt or visible contamination will be brushed. Then the equipment will be dried with disposable paper, the used paper will be discarded. The pieces of equipment, in a clean plastic pail, will be clean with moist disposable towels and then dried with paper. The unite will be inspected, calibrated and recharge as needed to have then ready for next day continuance of operations. Next day the units will again be covered for the daily use.

### 7.2.4 RESPIRATORS

The respirators will be decontaminated on a daily basis. They will be soak in a cleaning solution and rinse with tap water. The cartridges in use will be mark to know how long they have been in use. Each worker will inspect its respirator every morning to make sure it is in proper working conditions.



## **8.0 RECORD AND DOCUMENTATION**

The field supervisor will be responsible for the Project Activities Logbook. In this logbook all significant activities of the project will be log. Among other information, the name of project visitors, the supervisor documents time of the visit, employees name and their daily tasks and other relevant project information. The minimum recorded documentation will be:

- 1- Daily report of job tasks, name of employees and work time schedule.
- 2- Supervisor report of the dangerous situations or conditions as reported by the safety official on that day.
- 3- Report on the personnel exposure to hazardous material.
- 4- Name of visitors and time of visit.
- 5- Notify any personal injuries.

## **9.0 HEALTH AND OCCUPATIONAL SAFETY PLAN REVISION**

This Plan is an evolving document that responds to changes in the employee protection regulations. It is a dynamic and changing tool, so that it is in line with the latest changes in personal protection Every time the personal protection regulation changes the Plan will be change accordingly

If there are no changes in the Regulation the Plan will be revised every year in January.



APPENDIX A

PERSONNEL CERTIFICATES ACCUMULATIVE LOG



## TRAINING REQUIREMENTS

All TAAG employees need to take a training session on health and environmental safety prior to start a job in which there is the possibility of handling hazardous materials. Each employees will be train to handle hazardous waste and how to respond to an environmental emergency following the requirements of the Health and Occupational Safety Administration (OSHA), and the Training Manual to Handle Hazardous Waste and the TAAG Safety Manual. Initial training will be given at the start of the employment and yearly refreshers training will follow. The training program includes the among others the following activities:

1. OSHA 40 Hrs. Supervisor Course (Internal Program)
2. Laboratory Chemical Hygiene Plan (Internal Program)
3. How to read a Material Safety Data Sheet (Internal Program)
4. Handling/Supervision of Asbestos Containing Materials (AES Int'l, Inc.)
5. Handling/Supervision of Lead Base Paint (AES Int'l, Inc.)
6. Respiratory Protection Program (Internal Program)
7. Respirators Fit Test (Internal Program)
8. Medical Evaluation (CMT or Industrial Health Services, Inc.)
9. Spyrometry and Chest X-Ray (CMT Industrial Health Services, Inc.)
10. Laboratory Safety Program (Internal Program)
11. Fire Extinguishers Use (Local Fire Department)
12. First Aid Procedures (Red Cross – Local Office)



## Negocios

viernes, 24 de mayo de 2019

### CONSUMO

# Checkpoint Systems se va de Puerto Rico

Cerrará su planta en Ponce a principios de 2012 eliminando sobre 200 empleos

viernes, 21 de octubre de 2011 - 12:00 AM

Por ELNUEVODIA.COM



Nota de archivo: Este contenido fue publicado hace más de 90 días

La multinacional Checkpoint Systems cerrará su planta de manufactura en Ponce durante el primer trimestre del 2012, una movida que dejará sin empleo a las sobre 200 personas que laboran allí, confirmaron fuentes ligadas a la reestructuración.

Para continuar leyendo, haz login



Suscríbete hoy y continúa gozando el periodismo de calidad

<https://www.elnuevodia.com/negocios/consumo/nota/checkpointsystemssevadepuertorico-1098737/>



Suscríbete hoy y continúa apoyando el periodismo de calidad.

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Más información



 Ver 0 comentarios

## Te recomendamos



### NEGOCIOS

**Burger King venderá su hamburguesa vegana en Europa**



### NEGOCIOS

**La empresa Criolite expande sus operaciones a Ponce**



### NOTICIAS

**La alcaldesa de Ponce y el representante "Quiquito" Meléndez se reúnen en la Casa Blanca**



### NEGOCIOS

**Old Harbor Brewery renueva su producción**



### NEGOCIOS

**Aumentan las ventas de seguros agrícolas**



### NOTICIAS

**Un hombre muere calcinado en su residencia en Ponce**



### NEGOCIOS

**Aumenta la demanda de edificios para uso comercial y residencial en Santurce**



### NOTICIAS

**Ordenan el regreso de investigadores de Ciencias Forenses a Ponce**



## Contenido Patrocinado

EXHIBIT 8-A-2

BOCALISTA

**Las 10 predicciones de  
Los Simpsons más  
increíbles**

YUMBLA MX

**Los diez mejores países  
para irse a vivir**

BOCALISTA

**¡Lo peor de tuning!  
Estos 20 carros  
quedaron horribles**

BOCALISTA

**Las 5 mejores nuevas  
series de televisión que  
no te puedes...**

HOWSTUFFWORKS

**Solo 1 de cada 40  
personas puede  
nombrar todos estos...**

BOCALISTA

**¡No aguanto la risa con  
los 36 vecinos más  
dramáticos!**

YUMBLA MX

**Las ocho maravillas del  
mundo que tienes que  
conocer**

HOWSTUFFWORKS

**Quiz: ¿Crees conocer  
cuáles son las  
capitales...**



## BOCALISTA

**Si vendiste estos 15 juguetes te vas a arrepentir ¡valen oro!**



## BOCALISTA

**Las 8 carreteras mortales de Lationamérica**

**Más en negocios**

## ÚLTIMA HORA



**Old Harbor Brewery renueva su producción**



**Moody's ve avance en el acuerdo de la Autoridad de Energía Eléctrica**



**Aumentan las ventas de seguros agrícolas**



**El gobierno de Puerto Rico demanda a Toyota**



**Arranca aceleradora de Facebook en Puerto Rico**





**Reclaman un Código de Orden para San Juan que se aplique a todos los sectores**



**Abogan por echar a un lado el nuevo acuerdo sobre reestructuración de la AEE**



**Aumenta la demanda de edificios para uso comercial y residencial en Santurce**



**Panasonic dejará de proveer a Huawei componentes sujetos al veto de Estados Unidos**



**La Inter coloca con éxito \$21.6 millones en bonos Afica**

+VISTAS

+COMPARTIDAS

## Destacados

TODOS

**Federales investigan alta funcionaria de FEMA por contratos en Puerto Rico a Cobra Energy**

Hace 34 minutos.





**Autoridades federales presentan un cargo  
contra el extecladista de Atención Atención**



**Rosselló asegura que "estaremos dando la  
batalla" por el presupuesto**



**La alcaldesa de Ponce y el representante  
"Quiquito" Meléndez se reúnen en la Casa  
Blanca**



**Radican cargos contra una madre por  
apropiarse de \$19 mil de una clase graduanda**



¿Quiénes somos?

FAQ

Contáctanos

Tarifario



Términos y Condiciones

Política de Privacidad

EXHIBIT 8-A-2



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“Son unos 175 empleados que nos han sido informados e inmediatamente que recibí el documento me comuniqué con el Secretario del Trabajo para establecer un plan de trabajo para ver en la medida que podamos evitar el cierre”, informó Meléndez en una entrevista con WKAQ 580 al detallar que la compañía le envió una carta en la que menciona que alrededor de hace seis años están en un plan de cierre a nivel nacional.

Según la Alcaldesa, los 175 despidos serían efectivos el primer trimestre del año 2012 y que espera establecer una mesa de diálogo con los directivos para evaluar alternativas.

De lo contrario, Meléndez indicó que coordinará con el secretario del Trabajo, Miguel Romero, para ayudar a los empleados cesanteados con ferias de empleo o alternativas de estudio.

La Alcaldesa indicó que como parte del plan de cierre, se cree que la compañía se mudará a China en busca de menos costos de producción.

EXHIBIT 8-A-2



EXHIBIT 8-A-2





ESTADO LIBRE ASOCIADO DE PUERTO RICO

COMPANIA DE FOMENTO INDUSTRIAL DE PUERTO RICO  
PO BOX 362350 SAN JUAN PR 00936-2350

FAX: (809) 250-1599

8 de agosto de 1991

A : Lcda. Zwindia Terán  
P/C : Ing. José R. Fraguada  
: Sr. Pedro José Rivera *PPM*  
: Sr. Tomás Sanabria *PPM*  
DE : *Rafael Gutierrez*  
: Rafael Gutierrez  
ASUNTO : Checkpoint Systems de P.R.  
Edificio: M-1216-0-78-03  
Ponce, Puerto Rico  
Caso: 91I-138

El pasado 6 de agosto se visitó el edificio en el asunto, con el propósito de realizar una inspección ambiental. La misma fue solicitada por su oficina el 5 de agosto para la cancelación de contratos.

En la inspección se encontraron:

- a. Cinco drones de 55 galones cada uno, contienen materiales peligrosos (Phosphoric Acid 85%) corrosivo.
- b. Doce drones de la misma capacidad de los indicados arriba, conteniendo Sodium Hydroxide 50% Solution corrosivo.
- c. Cincuenta drones de 55 galones de capacidad conteniendo Acido Muriático - Producto peligroso.
- d. Tres drones de 55 galones cada uno conteniendo Polymeric Isocyanata, contiene diphenymethane y disocyanate.
- e. Setenta y ocho drones vacíos, donde hubo almacenado materiales peligrosos.

Para proceder con las recomendaciones para la cancelación del contrato, Checkpoint Systems de P.R., Inc. debe remover del módulo los drones en cuestión, cumpliendo con las reglas ambientales vigentes aplicables.

El industrial deberá enviar un comunicado por escrito a nuestra Oficina, donde nos informe que los drones fueron removidos del módulo.









## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

NOV 12 1987

Ms. Yazmin Lopez, Chief  
Permit & Engineering Section  
Puerto Rico Environmental Quality Board  
P.O. Box 11488  
Santurce, Puerto Rico 00910-1488

Re: Closure Certification  
Checkpoint Systems of Puerto Rico, Inc.  
EPA I.D. Number: PRD091126037

Dear Ms. Lopez:

The Environmental Protection Agency (EPA) has received the June 10, 1987 certification of closure from Checkpoint Systems of Puerto Rico (PRD091126037). We have also received the Environmental Quality Board's (EQB's) letter stating that the site was inspected by EQB and as a result, EQB has accepted this closure certification.

Based on the information provided to us by EQB, we accept your determination and will make the necessary changes to our data base. Please note that Interim Status will not be terminated for this facility until decisions on corrective action are finalized.

If you have any questions regarding this matter, please feel free to contact John Gorman at (212) 264-9631.

Sincerely yours,

Lori Amato, Chief  
Caribbean Facilities Section  
Hazardous Waste Facilities Branch

cc: Roberto Berberena, Jr. EQB

NOV 18 1987





ESTADO LIBRE ASOCIADO DE PUERTO RICO / OFICINA DEL GOBERNADO

Junta  
de Calidad  
AmbientalOFICINA DE  
RELACIONES PÚBLICAS  
MAR 27 1987

Mr. Luis A. Aguilera  
Vice President & General Manager  
Checkpoint Systems of P.R.  
Sabaneta Industrial Park  
P.O. Box 7283  
Ponce, Puerto Rico 00731


MAR. 31 1987

RE: Final Determination for  
Hazardous Waste surface  
impoundment Closure Plan for  
Checkpoint Systems of P.R.  
(PRD091126037)


Dear Mr. Aguilera:

Reference is made to the above mentioned subject. Under the authority granted by law 9 (Article 4 and 11) and the statutory regulatory requirements established on the "Regulation for the Control of Hazardous and Non-Hazardous Solid Wastes", you are hereby informed that the Puerto Rico Environmental Quality Board has approved the Closure Plan that had been submitted on March 20, 1985 with it's subsequent modifications.

This approval is valid only under the conditions for the information submitted in the Closure Plan.

  
Carlos R. Vázquez Ayala  
Associate Member

  
Carlos Jiménez Barber  
Vice Chairman

  
Santos Roldán Betancourt  
Chairman

PEV/RCA/mbg





**COMMONWEALTH OF PUERTO RICO**  
**Environmental Quality Board**  
**ENVIRONMENTAL QUALITY BOARD**  
 P.O. Box 11488, Santurce, Puerto Rico 00910

lease print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved, OMB No. 2000-0404 Expires 7-31-88

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. P R 0 0 9 1 1 2 6 0 3 7		Manifest Document No. 0 0 1 9 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address CHECKPOINT SYSTEMS, INC. P.O. BOX 7283 PONCE, P.R. 00732					A. State Manifest Document Number N/A		
4. Generator's Phone ( )		5. US EPA ID Number P. R. D. 0. 9. 1. 0. 1. 8. 6. 2. 2		B. State Generator's ID Babaoetas Industrial Park, Ponce, P.R.			
6. Transporter 1 Company Name SERVICIOS CARBARRON INC.		7. US EPA ID Number N/A		C. State Transporter's ID 15, 14041			
7. Transporter 2 Company Name N/A		8. US EPA ID Number N/A		D. Transporter's Phone (809) 836-2058			
9. Designated Facility Name and Site Address SERVICIOS CARBARRON INC. ROAD 385 Km 3.5 PENUELAS, P.R.		10. US EPA ID Number P. R. D. 0. 9. 1. 0. 1. 8. 6. 2. 2		E. State Transporter's ID N/A			
				F. Transporter's Phone N/A			
				G. State Facility's ID N/A			
				H. Facility's Phone (809) 836-2058			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)					12. Containers		1. Waste No.
					No.	Type	
a. CORROSIVE LIQUID, N.O.S. CORROSIVE MATERIAL, UN 1760					0 0 1	T T	5 0 0 0 G
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above SOLUTION CONTAINS FERRIC CHLORIDE DILUTED IN HYDROCHLORIC ACID PROCESADO COMPUTADORA					K. Handling Codes for Wastes Listed Above T-31		
15. Special Handling Instructions and Additional Information Area Control Contaminación de Terrenos							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations.							
Printed/Typed Name Humberto G. Gholiotti					Signature Humberto G. Gholiotti		Date Month Day Year 0 8   1 6   8 5
17. Transporter 1 Acknowledgment of Receipt of Materials					Signature Concepcion Torres		Date Month Day Year 0 8   1 6   8 5
18. Transporter 2 Acknowledgment or Receipt of Materials					Signature		Date Month Day Year 0 8   1 6   8 5
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name JUAN E. NEGRON					Signature Juan E. Negron		Date Month Day Year 0 8   1 6   8 5



ESTADO LIBRE ASOCIADO DE PUERTO RICO  
AUTORIDAD DE ACUEDUCTOS Y ALCANTARILLADOS

IN RE:

CHECKPOINT SYSTEMS OF P.R.  
Inc., PONCE, PR

QUERRELLADO

NOTIFICACION DE  
VIOLACION

PERMISO: GDA-93-408-022

NOV/PAO: GRO-98-12

\*\*\*\*\*

## NOTIFICACION DE VIOLACION

Por virtud del artículo 5.09 del Reglamento Sobre los Servicios de Agua y Alcantarillado (el Reglamento) y de conformidad a los poderes conferidos a la Autoridad de Acueductos y Alcantarillados de Puerto Rico (la Autoridad), 22 LPRA sección 141 et seq., la Autoridad por la presente notifica a Checkpoint Systems of Puerto Rico Inc. (CHECKPOINT), que ha violado su permiso de descarga GDA-93-408-022 y, por lo tanto, el Reglamento.

## RELACION DE HECHOS

1. Checkpoint opera la instalación la cual está localizada en el lote 28, Parque Industrial Sabanetas, Ponce, Puerto Rico (Apartado Postal 7283, Ponce, Puerto Rico, 00732-7283), la cual descarga aguas residuales a la Planta de Tratamiento de Aguas Residuales de Ponce.
2. Checkpoint es un usuario industrial significativo, clasificado 3999 a 3679-Componentes electrónicos, imprenta y "electronic tags". Clasificado, además, en el 40 CFR, subparte F, como "Chemical Etching and Milling Subcategory"
3. Un permiso de descarga de aguas residuales industriales fue concedido a Checkpoint bajo el capítulo V del Reglamento. De acuerdo a los términos del permiso el mismo tiene fecha de efectividad del 18 de marzo de 1997 y expiró el 22 marzo 1998. El número del permiso es GDA-93-408-022.
4. Checkpoint está obligada a someter a la Autoridad dentro de treinta (30) días posteriores al fin de cada mes informes de automonitoria y análisis (IAM).



5. Los informes de automuestreo (IAM) sometidos por Checkpoint han demostrado las siguientes excedencias y violaciones:

## VIOLACIONES 1997

FECHA	PARAMETRO	LIMITE PERMITIDO	RESULTADO
13-01-97	Flujo	35,000gpd	35,112gpd
21-01-97	Flujo	35,000gpd	43,560gpd 4y5-
03-97	Cadmio	0.10mg/l	0.30mg/l
	DQO	300mg/l	370mg/l
11-03-97	pH	6.5-9.0	6.4 y 10.4
12-03-97	pH	"	6.2 y 10.0
13-03-97	pH	"	6.2 y 11.5
14-03-97	pH	"	2.2 y 10.2
15-03-97	pH	"	4.4 y 6.4
16-03-97	pH	"	6.2
17-03-97	pH	"	5.8
18-03-97	pH	"	6.2
21-03-97	pH	"	10.3
22-03-97	pH	"	10.8
23-03-97	pH	"	10.4
24-03-97	pH	"	6.3
25-03-97	pH	"	6.4 y 10.4
26-03-97	pH	"	6.3
27-03-97	pH	"	6.2
28-03-97	pH	"	6.2
29-03-97	pH	"	6.3
30-03-97	pH	"	6.2
31-03-97	pH	"	6.3 y 9.4
02-04-97	pH	"	6.3
04-04-97	pH	"	10.2
05-04-97	pH	"	9.6
08-04-97	pH	"	6.4
09-04-97	pH	"	10.6
10-04-97	pH	"	10.8
11-04-97	pH	"	6.4



## EXHIBIT 17-A

14-04-97 pH " 6.3

FECHA	PARAMETRO	LIMITE PERMITIDO	RESULTADO
15-04-97	pH	"	6.2
16-04-97	pH	"	6.2
21-04-97	pH	"	6.1
22-04-97	pH	"	6.1
28-04-97	pH	"	6.4
29-04-97	pH	"	6.2
20-05-97	Flujo	35,000gpd	44,352gpd
21-05-97	Flujo	35,000gpd	35,112gpd
23-05-97	Flujo	35,000gpd	36,960gpd
02-05-97	pH	6.6-9.0	6.2
03-05-97	pH	"	5.6
08-05-97	pH	"	6.0
09-05-97	pH	"	6.2
16-05-97	pH	"	4.2
21-05-97	pH	"	11.6
25-05-97	pH	"	12.2
31-05-97	pH	"	5.6
06-06-97	Flujo	35,000gpd	41,448gpd
08-06-97	Flujo	"	52,800gpd
19-06-97	Flujo	"	41,712gpd
01-06-97	pH	6.5-9.0	6.2
05-06-97	pH	"	9.2
19-06-97	pH	"	9.6
20-06-97	pH	"	9.4
21-06-97	pH	"	9.4
22-06-97	pH	"	4 y 9.4
24-06-97	pH	"	4.5
25-06-97	pH	"	9.5
26-06-97	pH	"	9.2
27-06-97	pH	"	9.2
28-06-97	pH	"	9.2
29-06-97	pH	"	9.2



## EXHIBIT 17-A

4

01-07-97	Flujo	35,000gpd	69,168gpd
03-07-97	pH	6.5-9.0	9.2
04-07-97	pH	"	9.2

FECHA	PARAMETRO	LIMITE PERMITIDO	RESULTADO
05-07-97	pH	"	9.2
06-07-97	pH	"	9.2
07-07-97	pH	"	9.2
08-07-97	pH	"	9.1
09-07-97	pH	"	9.1
10-07-97	pH	"	9.1
20-07-97	pH	"	9.2
21-07-97	pH	"	5.4 y 9.3
22-07-97	pH	"	4.4
30-07-97	pH	"	2.8
31-07-97	pH	"	0.6
07-08-97	Flujo	35,000gpd	41,712gpd
15-08-97	Flujo	"	37,224gpd
18-08-97	Flujo	"	44,088gpd
20-08-97	Flujo	"	37,488gpd
21-08-97	Flujo	"	53,592gpd
22-08-97	Flujo	"	39,336gpd
26-08-97	Flujo	"	35,376gpd
30-08-97	Flujo	"	37,752gpd
01-08-97	pH	6.5-9.0	1 y 12.1
02-08-97	pH	"	6.2
08-08-97	pH	"	6.3
09-08-97	pH	"	4.3
11-08-97	pH	"	9.5
12-08-97	pH	"	9.3
13-08-97	pH	"	9.7
14-08-97	pH	"	9.6
15-08-97	pH	"	5.9
16-08-97	pH	"	9.87
17-08-97	pH	"	9.6



## EXHIBIT 17-A

5

FECHA	PARAMETRO	LIMITE PERMITIDO	RESULTADO
20-08-97	pH	"	9.5
21-08-97	pH	"	9.2
22-08-97	pH	"	13.325-08-97
25-08-97	pH	"	12.1
26-08-97	pH	"	9.1
03-09-97	Flujo	35,000gpd	39,000gpd
10-09-97	pH	6.5-9.0	9.2
11-09-97	pH	"	5.6
16-09-97	pH	"	10.7
18-09-97	pH	"	3.8
19-09-97	pH	"	4.2
25-09-97	pH	"	5.8
26-09-97	pH	"	12.2
27-09-97	pH	"	6.1 y 11.8
28-09-97	pH	"	11.8
30-09-97	pH	"	4.8 y 9.8
08-10-97	Flujo	35,000gpd	90,816gpd
21-10-97	Flujo	"	35,640gpd
25-10-97	Flujo	"	40,656gpd
29-10-97	Flujo	"	35,904gpd
09-10-97	pH	6.5-9.0	11.2
12-10-97	pH	"	12.2
14-10-97	pH	"	12.1
19-10-97	pH	"	12.5
22-10-97	pH	"	9.4
23-10-97	pH	"	11.0
30-10-97	pH	"	9.2
04-11-97	Flujo	35,000gpd	59,664gpd
11-11-97	pH	"	35,640gpd
04-11-97	pH	6.5-9.0	5.9
16-11-97	pH	"	6.4
17-11-97	pH	"	5.5
19-11-97	pH	"	4.8
26-11-97	pH	"	4.6



## VIOLACIONES 1998

2 Y 3-02-98	Hierro	2.00mg/l	3.25.mg/l
18 y 19-02-98	Hierro	"	2.40mg/l
25-02-98	pH	6.5-9.0	4.8

## VIOLACIONES

Basados en la información sometida por Checkpoint y el Permiso de Descarga expedido, la Autoridad encuentra que Checkpoint está en violación de su permiso de descarga y el Reglamento de la Autoridad vigente.

Por todo lo cual, se le requiere a Checkpoint:

1. Tomar las medidas correctivas necesarias para evitar toda violación al Permiso y el Reglamento vigente.
2. Someter un Plan de Cumplimiento en un término no mayor de diez días, contados a partir del recibo de la presente notificación, donde informe cómo ha corregido ó cómo va a corregir las violaciones notificadas.

La Sección 3.7 del Reglamento de Procedimientos Administrativos-Legales de la Autoridad de Acueductos y Alcantarillados de Puerto Rico, al igual que el Artículo 5.09 del Reglamento, dispone que dentro de diez días después de recibir la Notificación de Violación y la Orden Administrativa Propuesta que le acompaña el usuario podrá optar a la Resolución Informal de este proceso al someter a la Autoridad un Plan de Cumplimiento indicando las medidas que tomará para corregir las violaciones imputadas, las cantidades que pagará a la Autoridad para gastos, daños y/o penalidades civiles y cualquier otra propuesta que estime apropiada. De no ser satisfactorio el Plan de Cumplimiento sometido, así lo informará la Autoridad por correo certificado con acuse de recibo al usuario, quien dentro de los diez días siguientes al recibo de la notificación del rechazo podrá solicitar una Vista Administrativa. La decisión de la Autoridad



aprobando o rechazando dicho Plan de Cumplimiento será final e inapelable.

De no optar por la Resolución Informal de este proceso, el usuario podrá solicitar Vista Administrativa dentro de los treinta (30) días siguientes al recibo de la presente Notificación de Violación y de la Orden Propuesta que le acompaña, según se dispone en la Sección 3.8 del Reglamento de Procedimientos Administrativos Legales. Si el usuario no solicita vista Administrativa y decide no optar por la Resolución Informal, la Autoridad expedirá la Orden Propuesta como final e inapelable.

Toda comunicación dirigida a la Autoridad bajo los términos de la Sección 3.7 deberá dirigirse dentro del término prescrito a:

Leda. Gladys Rodríguez Orozco  
Abogada III  
Autoridad de Acueductos y Alcantarillados de Puerto Rico  
P.O. Box 7066  
San Juan, Puerto Rico 00916-7066

25 con copia a la Sra. Clara O'Neill, Directora del Área De Servicios Ambientales, a la Sra. Martha Rivera Rosa, Ayudante del Subdirector Ejecutivo en Apoyo Gerencial y Servicios Ambientales y al Sr. Steven Moreno, Director de Pretratamiento, Autoridad de Acueductos y Alcantarillados de Puerto Rico, P. O. Box 7066, San Juan, PR 00916-7066

Toda petición de Vista Administrativa se hará mediante moción y/o solicitud escrita (Querrela) exponiendo brevemente los argumentos del usuario y se enviará por correo certificado con acuse de recibo al Director Ejecutivo de la Autoridad dentro de los términos antes indicados.

SE LE APERCIBE, que la Autoridad podrá suspender el servicio de agua y/o alcantarillado al usuario de no cumplir con lo antes expuesto. Si las violaciones son de tal magnitud que cause daños severos a las facilidades de la Autoridad, se procederá a revocarle su permiso y desconectársele del sistema a su costo.



En San Juan, Puerto Rico, a 30 de septiembre de 1998.

*Clara O'Neill*

Clara O'Neill  
Directora  
Area de Servicios Ambientales